VOL. CCXXVIII, No. 2973
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— THE WORLD'S NEWS IN PICTURES

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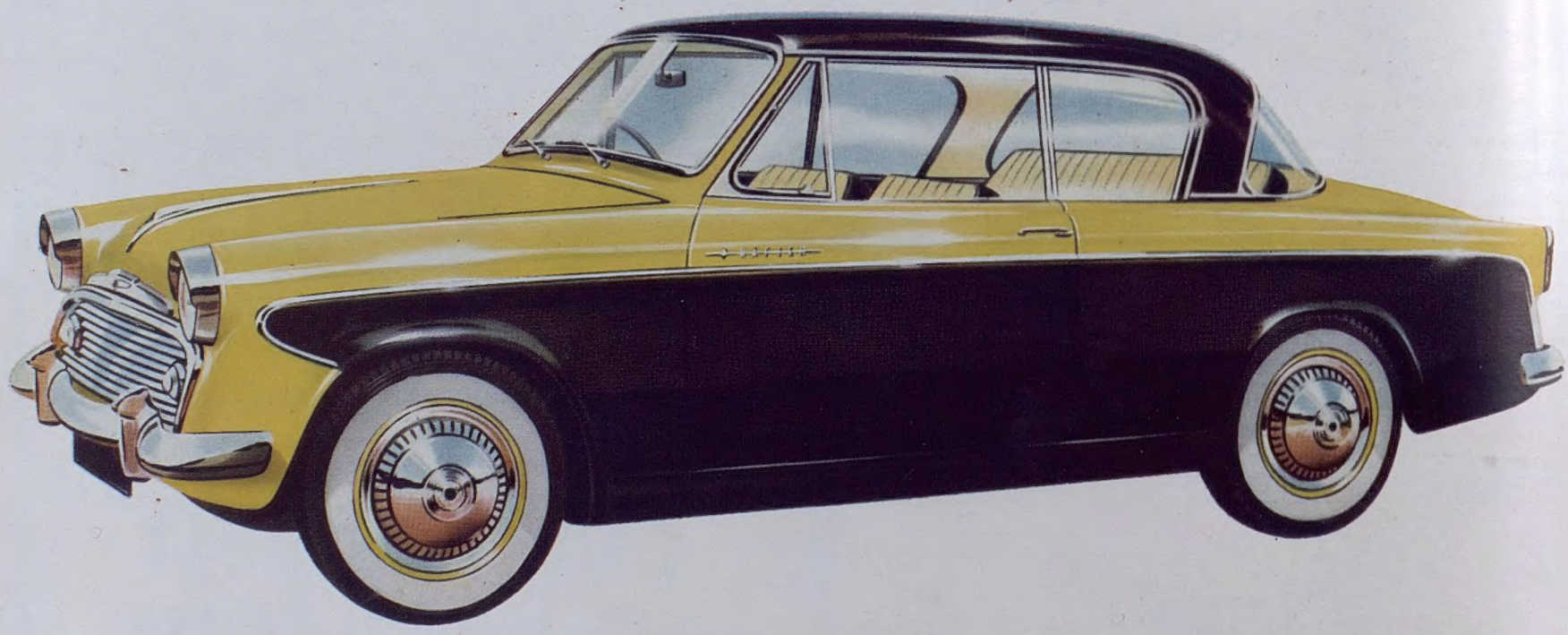

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The new Eagle tubeless, built with exclusive Goodyear Grip-Seal Construction for puncture and burst protection, is unmatched in any other tyre. Also made in tube-type construction. Majestic . . . graceful . . . dramatically new in styling, the mighty new Eagle by Goodyear is indeed a masterpiece of tyre craftsmanship.

3-T

Under every tyre tread are plies of cord fabric. Ordinary cords stretch and weaken. Now, the Goodyear 3-T process "triple-tempers" the cord fabric in a special machine. The cords pass through at a controlled Tension and Temperature for a specific Time. The result? Strongest, most heat-and-stretch resistant cords possible and a tyre of outstanding durability and lasting resilience.

THE ULTIMATE IN CAR TYRE QUALITY

Is this Justice?

THIS IS JUSTICE, ALL RIGHT. *James Robertson* Justice himself—and in full cry. Mr. Justice, after his great success in the Rank Organisation films 'Doctor in the House' and 'Doctor at Sea', will shortly be seen with Dirk Bogarde in the latest of the series, 'Doctor at Large'. And very funny it is, too.

This advertisement might have been headed 'This is *not* justice', because its purpose is to bring to the attention of thinking people a case of premeditated injustice. We speak of Entertainment Tax.

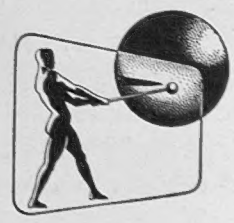
This nagging tax is very much the *bête noire* of the film industry. It is unjust. And into the bargain it is thoroughly bad economics.

It's not as if the film industry were encouraging inflation by increasing home consumption at the expense of exports. We are in the unique position of being able to *export the same product that we consume at home!* With negligible cost of extra film stock.

For the Rank Organisation the 'Doctor' films have a special place because they actually made a profit from exhibition in the U.K! With Entertainment Tax at its present rate it is most unusual for British films even to recover production costs from the home market.

The whole industry asks the Government to reduce Entertainment Tax to a more realistic figure. Justice will then be done.

THE RANK ORGANISATION LIMITED

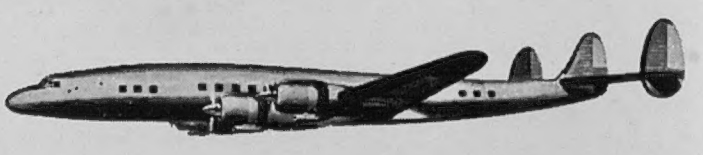


MISS FLORENCE CHADWICK: SHE'S CRAWLED AROUND THE WORLD

World-champion channel swimmer. Miss Chadwick has logged 25,000 miles in the water — equal to the distance around the world. Using the American crawl, she's bested Gibraltar Strait, the Dardanelles, the Catalina Channel, the English Channel (both ways) — feats that defeat muscular males. Yet she's no amazon: adores clothes, owns 80 pairs of shoes.

Constantly on the go, Miss Chadwick finds relaxation easy on Lockheed luxury liners. These smooth-flying giants have deep lounge chairs, distinguished decor, tranquil quiet. Little wonder 22 world airlines — and experienced air travelers everywhere — choose Super Constellations.

This year (perhaps to find new channels to swim), Miss Chadwick will fly to Europe aboard the New, even faster, longer-range Lockheed luxury liner (Model 1649) . . . via AIR FRANCE.



Now in service: The Super Constellation

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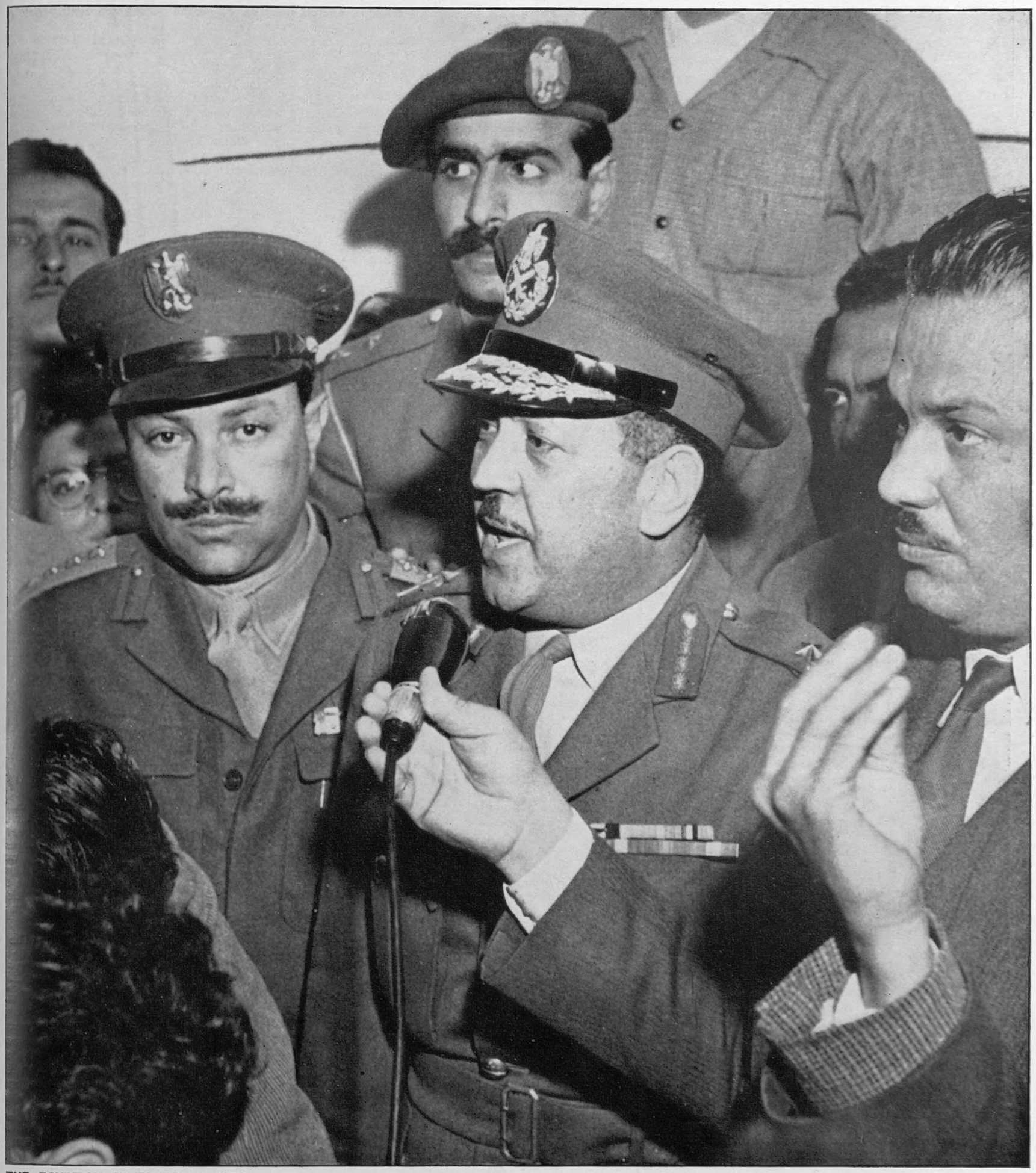
Volume CCXXVIII No. 2973

The SPHERE, London, March 23, 1957

The SPHERE

with which is incorporated THE GRAPHIC



THE EGYPTIAN GOVERNOR IN GAZA — GENERAL ABDUL LATIF PROCLAIMS "EGYPT IS NOW IN POWER": The Administrative Governor appointed by Colonel Nasser talks to the Press after his arrival in Gaza. He said that the United Nations force did not affect the civil administration. His presence in Gaza was regarded by Israel as "a most grave development," and Mrs. Meir, the Israeli Foreign Minister, flew immediately to America for an interview with Mr. Dulles.

When Mrs. Meir arrived in Washington shortly before the Bermuda talks, United States spokesmen made no attempt to minimise the fact that the crisis over Gaza was becoming increasingly serious. The Israeli Foreign Minister was expected to protest to Mr. Dulles against Colonel Nasser's action in appointing a civilian Governor of Gaza, General Latif, and in ordering him to take up his post. General Latif, who reached the town at the end of last week, announced, without qualification, that Egypt was back in power and that the United Nations Emergency Force, in the opinion of his masters in Cairo, had nothing to do with civil administration. The immediate reaction in Israel was that President Nasser was "flouting the United Nations" and intending to transform the Gaza Strip once more into a base for fedayeen warfare. However, Mrs. Meir on arrival in the United States refused to say whether her country felt it had "been sold out" by the United Nations. After her interview with Mr. Dulles the latter was due to go to Bermuda for the talks between Mr. Macmillan and President Eisenhower. (Further Gaza pictures on pages 448 and 449.)

Postage—Inland, 3d.; Canada, 1½d.; Elsewhere Abroad, 2½d.

THE SHIPBUILDING STRIKE

UNION LEADERS AT THE MINISTRY OF LABOUR: From left to right are Mr. W. Carron, President of the Amalgamated Engineering Union; Mr. E. J. Hill, General Secretary of the United Society of Boilermakers; and Mr. J. R. Scott, Chairman of the Railway sub-committee of the Confederation of Shipbuilding and Engineering Unions. They are standing outside the Ministry of Labour, in London, before a critical interview with the Minister, Mr. Macleod, in which they informed him why the shipworkers intended to strike.

DOCTORS IN DOWNING STREET

MEDICAL SPOKESMEN SEE THE PRIME MINISTER: Sir Russell Brain (left) and Dr. Talbot Rogers, joint chairmen of the doctors' negotiating committee, arrive for talks with Mr. Macmillan at his official residence. They put forward their claim for higher remuneration for doctors but stated later that the meeting was disappointing. The demand for increased pay for doctors in the National Health Service is at present being investigated by a Royal Commission.

"FASTEST MAN IN THE WORLD"

MR. PETER TWISS RECEIVES THE SEGRAVE TROPHY: The test pilot who achieved a world record by reaching nearly 1,132 m.p.h. in the Fairey Delta 2 aircraft a year ago is presented with his award by Mr. Aubrey Jones (on left), the Minister of Supply. The presentation took place in the Royal Automobile Club in London. The Segrave Trophy commemorates the late Sir Henry Segrave.

RATES OF SUBSCRIPTION TO "THE SPHERE"

Orders for subscription to THE SPHERE *should be handed to any bookstall or newsagent, or addressed to the Subscription Department,* THE SPHERE, *Ingram House, 195-198, Strand, London, W.C.2. The rates for 12 months, including Christmas Number, for Great Britain and Eire, are £6 1s. 6d.; 6 months and Christmas Number, £3 3s.; 6 months without Christmas Number, £2 18s. 6d. For Canada the rates for the same periods are £5 14s. 6d. (or $16), £2 19s. 6d. and £2 15s.; and for elsewhere Overseas £5 19s. ($16.50 cents in the U.S.A.), £3 1s. 9d. and £2 17s. 6d. All terms above include postage.*

A London Newsletter

195-198, STRAND, W.C.2.

At the Pistol Point.—At the beginning of the week the strike in the shipbuilding yards became general. It seemed probable that a much wider stoppage of work would follow in engineering. Is there any hope of sane counsels prevailing to find a solution for this national calamity? We face, at a vital time, one of the gravest industrial crises since the General Strike. The shipbuilding unions have refused to take part in a special form of arbitration proposed by the Minister. Their spokesman was uncompromising. No arbitration, no inquiry. "It is either a cash offer or a strike. We are not worried about the effect on our exports. All we are worried about is our wage claim. Our members come before the country." I hope his words were perhaps quoted out of context and that what he said in full sounded less terrible and hopeless. The 10 per cent. demand would add about £110,000,000 to the wages bill in these vital industries, already feeling the pinch of competition, and struggling to revive after the setback which followed Suez. "Our members come before the country." This unhappy country may indeed be "two nations," but both nations *are* the country and depend for bare survival on the country's survival. The monkeys learned that at the foot of the tree when they had sawn off the branch they sat on. If their spokesman had relied on arguments that another £110,000,000 added to overheads would have no effect whatever on checking the rise of our exports in a highly competitive market, those arguments would deserve serious examination under arbitrament. But there is to be no arbitration in the shipyards, it seems. The part is greater than the whole; to-day's pay packet is more important than to-morrow's security. *Après moi, le déluge.* If it seems hopeless, we must never abandon hope. Even in Bedlam, sanity sometimes creeps in.

Nasser Finally Exposed.—I doubt whether Nasser required further exposure as the megalomaniac he is, to convince any but the pro-Egyptian bloc among the U.N. nations. But that exposure—necessary or not—came within three days of the Israeli withdrawal from Gaza on the promise that the U.N. force would fill the vacuum and prevent Egypt from beginning again the sickening technique on Israel's border which set the Middle East ablaze and led directly to the Suez crisis. The U.N. force moved in to prevent that very thing as the only way of getting Israel to obey the U.N. resolution. In a matter of hours, Nasser announced Egypt's resumption of control, appointed a Governor and virtually ordered the Emergency Force out. If the U.N. now feels a sense of humiliation, what must be the feelings of the U.S.A.? It was Eisenhower's comfortable assurance that Egypt would not be suffered to return that persuaded Ben-Gurion, in the teeth of his nation's opposition, to bow to the U.N., just as it was Eisenhower's post-ultimatum policy which prevented Britain and France from accomplishing what must now be recognised as essential to peace in the Middle East, and perhaps the world—the disciplining of a maniac saboteur. I fancy that Mr. Eisenhower, Mr. Hammarskjoeld and Mr. Ben-Gurion must all be regretting some of their recent words and actions, and would be glad to unsay and undo them. It may be that Ben-Gurion will fall, or reverse his policy. It may be that Israel will once more show patience and accept new "guarantees." It may be that Nasser will temporarily eat his words, withdraw his Governor and countermand his orders to the Emergency Force. What is certain is that he is too dangerous to live as a world dictator for another year, and that the U.S.A. and the U.N. must somehow begin more realistically to dethrone him as a martyr and a world statesman, and to treat him as a dangerous lunatic and a No. 1 world nuisance. This is one more instance of a not uncommon modern phenomenon—the man in the street clearly seeing the inevitable consequences of international policy and the world's statesmen sleep-walking in Cloud-Cuckoo Land.

Oil Supplies—No Quick Return to Normal.—The motorist will be unwise to throw his hat in the air and his remaining coupons in the fire on the latest news from the Canal Zone. The Suez Canal may be open to ships of 500 tons already and may be open to 10,000-tonners fairly soon, but only on terms which suggest another long battle with world dictator Nasser and one more testing-time for U.N. and the Western Alliance, not to say the Canal Users' Association. If Nasser insists that no ship may use the Canal unless the full dues are paid to Egypt, it looks as if British, French, U.S.A. and Norwegian vessels, at any rate, will be denied passage. For all these countries, and a few more, have proposed that, as an interim measure pending final settlement, all tolls should be paid to the International Bank or other neutral body, to be allocated as to one-half to Egypt and the other to be held against development, conservation and other claims and costs. But probably these countries will bow to the dictator's compromise and content themselves with "writing to *The Times* about it." Meanwhile, freedom of the Canal is a visionary thing and our own shipping is likely to boycott the Canal. Then again the promise of oil flowing once more through Syrian pipelines from Iraq to the Mediterranean cannot for months to come mean a return to the *status quo*, even if no new snags occur. So far as British needs are concerned, our share of the supply will be small indeed, and even that must be first earmarked for rebuilding our depleted reserves. Less than half the original flow can be expected this side of autumn and that original flow represents but 6 per cent. of Europe's total needs.

THE RESTORED HALL AT ALEXANDRA PALACE

THE REOPENING OF A FAMOUS LONDON BUILDING: The Great Hall at Alexandra Palace, which has been renovated and repaired, was opened last week by Sir Frederick Handley Page, Lord-Lieutenant of Middlesex. He unveiled a plaque to commemorate the occasion. The Palace, which is a familiar landmark in North London, was built in 1875 and suffered considerable damage during the last war. Part of the cost of the repair of the Hall was met by the War Damage Commission, but the major proportion was raised by trustees appointed by the Middlesex County Council. The building will be used for concerts and exhibitions. The first exhibition—the North London Home Life Exhibition—will open on April 16.

House of Lords Reform.—The Government is to reveal and ventilate in the Lords its promised reform-proposals for the Upper House. There is no expectation of a Bill this session, however, even if no out-and-out opposition is revealed in either House. There is no good reason why the Commons should object since no attempt will be made to improve existing powers. There is indeed more reason to expect opposition from the Lords. The five points are much what we expected: 1. Life peerages drawn chiefly from both sides in industry, science, arts, local government and universities. 2. Election in the Scottish fashion of a limited number of hereditary peers by their peers. 3. A composition of 300 "live" peers in lieu of a potential of 800; half life peers, half hereditary. 4. Women, whether hereditary or life peers, to be eligible. 5. Payment for regular attendance, perhaps on the lines of bank directors. No. 2 presumably would meet the objections of such peers as Lord Hailsham, who would have preferred to remain in the Commons. Such successors to peerages need not put up for election in the hereditary class and would presumably then be free to stand for the Commons.

By-election Landslides.—The Socialists may fairly claim that they won a smashing victory at Warwick. Sir Anthony's old seat was a Tory stronghold. To-day it is a dicky marginal seat—a 2,000

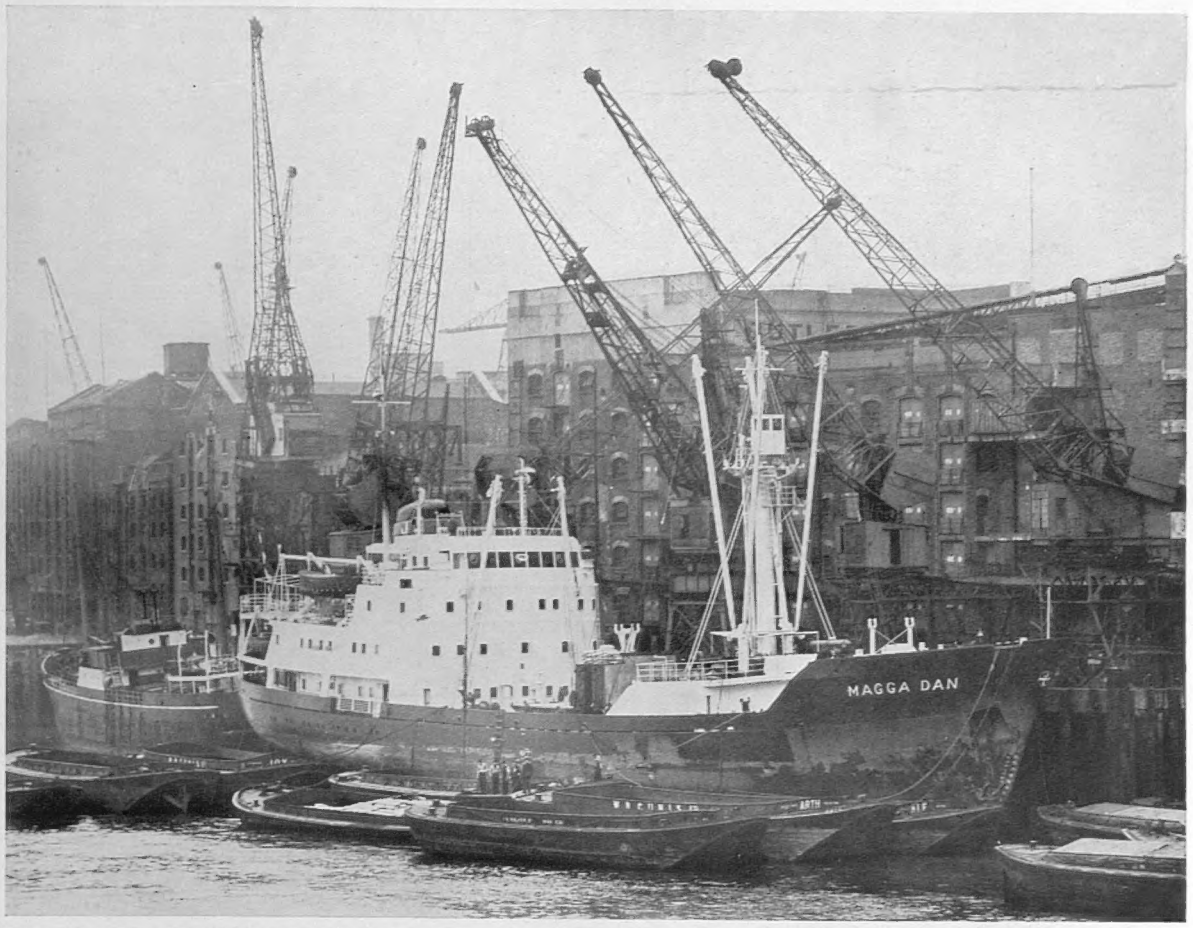
majority where, at the General Election, there was a 13,500 majority. If Sir Anthony's long, personal popularity, the pride of being represented by the Premier and the normal swing of the pendulum at the General Election all contributed to that handsome majority and carried the wobblers' votes, the Government must, none the less, have been shocked to the marrow by this landslide, and others. They knew that Sir Anthony's personal popularity had greatly waned, they know that, as a government pressing through unpopular measures or measures still too little understood to be accepted for their long-term benefits, they must lose a great deal of support at by-elections at a normally dangerous age in the life of a government. They knew that for some time to come the Suez adventure, with all the discomfort it entails, must tell against them. These things they knew and have repeatedly, and rightly, declared that they will fearlessly press forward with the reforms which they think right in the belief that, before their term ends, the fruits will be tasted and will draw the wobblers back to the fold. They may perhaps take comfort from another difference between now and then. Warwick and Leamington are changed towns. Modern housing and industrialism have greatly altered the sylvan charms of these places and greatly increased the Socialist potential. But Leamington still is a stronghold of retired officials and pensioners, and the Government will do well to acknowledge the extent of the middle-class revolt after decades of oppressive discrimination. This section has shared none of the advances in the standard of living and consists of the "new poor," taxed out of existence and forgotten in the clamour of louder, better organised and more powerful voices always asking for more. It is these "new poor" who largely compose the floating vote which can make or mar majorities, and unless something is done *this* April to assure them they are not totally forgotten, I very much doubt if a promise of jam in April 1958 will stop the rot in by-elections to come.

"The Romance of War."—A Soviet-German Red Cross conference has been meeting in Bonn to decide on the repatriation of German prisoners still in Soviet hands. The hopes of bereaved German parents must have been dashed by the first report of the West German Red Cross after a visit to Moscow. It says that there are few survivors to-day and all their names are known. There are 1,200,000 listed as "missing" who must now be assumed dead. How many Germans were taken prisoner by Russia during the war is anybody's guess. The German military authorities once put it as high as 4,500,000. In May 1945 the Soviet High Command put the figure at just over 3,000,000. By May 1950, 2,000,000 had been returned and at that time the Russians announced that only 13,000 remained. Evidence from returned prisoners collected by the Red Cross give a fearful picture of the wastage, piecemeal. Of 220,000 Germans surrounded at Stalingrad, *all* but 30,000 were killed or taken prisoner. Of the prisoners, hardly 2,000 survived. They died of cold and exhaustion on the march to camps. In one camp, the death rate was 300 a day, and two-thirds of the inmates died. Of those moved on to Siberia, 35 per cent. died *en route*. Of the 18,000 who reached Siberia, two-thirds soon died. Thus of the Stalingrad quarter-million, only 6·5 per cent. survived. Their comrades who died on the field were the lucky ones. Such is war in modern times. It is small wonder if many of us dislike the idea of another.

Arundel Castle Bill.—I like to be accurate in matters which interest me and I am grateful to the National Trust for correcting an error which crept in to my recent reference to the Arundel Castle Bill which is coming before the Lords. The Castle is not intended by the Bill to become, like Petworth, a National Trust property in west Sussex. The proposal is that Arundel shall be vested in trustees, having the same powers of management as has the National Trust over its trust properties. But the National Trust will have no legal interest in Arundel, although the Chairman of its Executive will be one of the three Arundel trustees who have the power of appointment of future trustees. One other feature of the Bill, not mentioned in my earlier reference, is worth recording. In addition to the £250,000 endowment fund charged on the Strand properties, the Bill proposes a similar sum to be raised as a "compensation" fund for collateral heirs who might have had an interest in the "Parliamentary" estates on succession, if the Act of 1627 remained unaltered. This fund would be secured by a twenty-one-year accumulation period. Various amendments to the Bill have already been suggested by Lord Simonds and will, no doubt, be considered in the House. In particular he wondered whether a custodian trustee might not be a better and more practical idea than the choice of three very busy men for duties likely for years to come to be heavy and continuous. There is nothing to prevent a custodian trustee (such as the public trustee) acting with private trustees, and apparently chosen trustees may choose substitutes to act for them, if their public work is too onerous.

THE OLD STAGER

THE "MAGGA DAN" RETURNS TO LONDON



THE ANTARCTIC EXPLORERS' SHIP BERTHED IN THE THAMES: *Magga Dan* **lies at Butler's Wharf, near Tower Bridge, in London, after completing her 19,000-mile voyage from Britain to the Antarctic and back. Last November she took out the main parties of the Commonwealth Trans-Antarctic and the Royal Society expeditions to Vahsel Bay, in Antarctica. She brought back two members of the Commonwealth Advance Party from Shackleton Base and all ten members of the Royal Society's advance party from Halley Bay. Both these parties spent the last Polar winter at their lonely Antarctic base camps.**

"MAGGA DAN" AT TOWER BRIDGE: The ship has turned to end her voyage at Butler's wharf. The twelve explorers returning from the Antarctic were welcomed by many of their own relatives and friends and also by relatives of members of the main parties of the Commonwealth Trans-Antarctic and the Royal Society expeditions now wintering in Antarctica.

THE NEWS IN PICTURES

PREPARATIONS FOR THE BERMUDA CONFERENCE: British and American officials meet at the Colonial Secretariat in Bermuda to make arrangements for the talks between Mr. Harold Macmillan and President Eisenhower. In the foreground wearing a dark suit is Mr. James Hagerty, the American President's Press Secretary, and across the table with dark-rimmed glasses is Mr. D'Arcy Edmondson, Director of Information in the British Embassy in Washington. Before leaving for Bermuda, Mr. Macmillan spent a week-end at Chequers, where the Foreign Secretary, Mr. Selwyn Lloyd, and the Chancellor of the Exchequer, Mr. Thorneycroft, were his guests. Two of the major subjects at the Bermuda Conference, Britain's N.A.T.O. commitments in Europe and the reopening of the Suez Canal, also directly affect Mr. Thorneycroft's Budget.

PRESIDENT EISENHOWER BOUND FOR BERMUDA: The American President leaves Washington by air for Norfolk, Virginia, where he boarded the U.S. cruiser *Canberra* for a six-day voyage to Bermuda and his meeting with the Prime Minister, Mr. Macmillan.

FIGHTING IN THE STREETS OF HAVANA: Soldiers take up positions near the Presidential Palace, in Havana, Cuba, during an abortive attempt by groups of armed students to storm the palace and capture or kill President Batista.

A REBELLION CRUSHED IN CUBA: President Fulgencia Batista (centre, hand raised) acknowledges the cheers of his supporters in the Presidential Palace in Havana, after the crushing of the Cuban revolution. An attempt was made by student rebels to storm the Palace and to capture or kill the President. The revolt was put down in two hours by the Havana police, reinforced by tanks and troops brought in from a military camp near the city. It is estimated that forty people were killed in the fighting, including an American tourist who was watching the battle from an hotel window. Two groups of attackers, each comprising about twenty people, led the assault on the Government forces. One group penetrated the Palace, but was annihilated before it could reach the second floor, where President Batista was having lunch. The second group took to the roof-tops to provide covering fire for the attack on the Palace. In the fighting inside and in front of the Presidential Palace some twenty people were killed. The other twenty deaths were in other clashes throughout the city, some of them near the offices of a pro-Batista newspaper and others near a police headquarters in the Vendado suburb. After the end of the fighting President Batista said that he had been forewarned of the revolt three days ago and that the guards in the Palace had been specially strengthened. He claimed that the rising was instigated by the former President, Dr. Carlos Prio Socarras.

On left—

REMOVING THE WOUNDED FOR FIRST AID: One of the guards wounded in the attack on the Presidential Palace in Havana, Cuba, is removed to a first-aid station by stretcher-bearers while the fighting still continues. It took the Havana police and army reinforcements two hours to put down the attempted rising by armed students. The Palace guard had been reinforced when the authorities got news that an attempt was to be made.

THE STRIKE CLOSES BRITAIN'S SHIPYARDS: Left to right in the strike-bound Clyde shipyards are a cruiser, H.M.S. *Tiger*, the new Cunarder *Sylvania*, and four tankers in different stages of construction. The shipyards of the Clyde, Tyneside, Merseyside, Belfast and the Thames have been paralysed by the strike. At a meeting in Liverpool, Mr. E. J. Hill, General Secretary of the Boilermakers' Society and spokesman of the shipyard unions, said that the struggle might be long and bitter but it would be fought to the end. Although the Employers' Federation agreed to arbitration the unions have categorically rejected this reasonable method. Mr. Hill has declared "We want cash or nothing." At the moment, despite desperate efforts to clear some of them before the strike began, well over 300 ships of more than 100 tons remain on the slipways, in fitting-out basins, dry docks or repair berths. They total more than 200,000 tons. In addition there are launches, fishing-boats and other craft on which work must be stopped in the many smaller yards all over the country. Many larger vessels which were due for overhaul or repair have been diverted to Continental ports.

On left—

A MASS MEETING OF STRIKERS AT LIVERPOOL: Strikers gather at a blitzed site in Lord Street, Liverpool, for a mass meeting called by the unions after the strike had begun. They were addressed by Mr. Hill, the General Secretary of the United Society of Boilermakers, who is acting as a general spokesman for the various shipbuilding unions concerned in the strike.

ON TRIAL IN BUDAPEST: These four youths were among seven young defendants who were found guilty of illegal possession of arms by a Hungarian court in Budapest. They were sentenced to prison for terms varying from five years to eighteen months. From left to right are B. Miklos and K. Janos, both sentenced to four years, and B. Mihaly and T. Laszlo, both sentenced to three-and-a-half years. The Kadar police have recently intensified their efforts to find the caches of weapons hidden throughout Hungary after the rising. The hidden arms present a constant danger to the unpopular regime.

HUNGARIAN JOURNALISTS IN COURT: Josef Gali, a Hungarian writer, gives evidence before a court in Budapest during the trial of several freedom fighters arrested by the security police. Among those who were summoned to appear as witnesses was Gyula Obersovsky, who was editor of the underground newspaper *Elunk* ("We Are Alive") which was published during the rising. Lately the Kadar regime has stepped up its attempts to crush out all vestiges of the patriot forces. Throwing aside its earlier conciliatory attitude which was designed to hoodwink the people until its power was more secure, the Government has now adopted a programme of oppression. Publicity is given to some trials but many hundreds of others are in secret.

The News in Pictures

THE SINGAPORE CONSTITUTIONAL CONFERENCE IN LONDON: The scene at the opening session in Lancaster House. Sitting at the table on the left are Inche Abdul Hamid bin Haji Jumat, Deputy Chief Minister of Singapore; Mr. Lim Yew Hock, Chief Minister; Mr. Chew Swee Kee, Minister for Education; and Mr. Lee Kuan Yew, a member of the People's Action Party. At the corner beyond them is Sir Robert Black, Governor of Singapore. At the right-hand table three advisers from the Colonial Office are in the foreground. Next sits Mr. Lennox-Boyd, Secretary of State for the Colonies. Beyond him are Lord Perth, Minister of State, Colonial Office, and Mr. J. D. Profumo, the Parliamentary Under-Secretary. A year ago a conference in London on the constitutional future of Singapore broke down. In the new conference which began last week, Mr. Lim Yew Hock declared that he and his colleagues were unanimous in seeking "the status of a self-governing State with all the rights, powers and privileges pertaining thereto in all internal affairs, and the control of trade, commerce and cultural relations in external affairs."

THE CHAIRMAN AND DEPUTY CHAIRMAN: Mr. Lennox-Boyd (right) and Lord Perth. Opening the Conference, the Colonial Secretary said it was "a joint attempt to find common ground."

LEADERS OF THE SINGAPORE DELEGATION: The Chief Minister (right) of the Colony talks with the Deputy Minister before the start of the talks in London on the future of Singapore.

THE S.E.A.T.O. CONFERENCE IN CANBERRA, AUSTRALIA: The military advisers to the Council of Ministers of the South-East Asia Treaty Organisation attend a conference during the meeting of the Organisation in the Australian Federal capital. From left are: General Jira Vichitsonggram of Siam; Rear-Admiral H. M. S. Choudri (Pakistan); Air Marshal Sir Francis Fressanges (United Kingdom); Air Marshal Sir John McCauley (Australia); Admiral Felix B. Stump (United States); Vice-Amiral d'Escadre P. Ortoli (France); Lieut.-General Alfonso Arellano (Philippines); Major-General C. E. Weir (New Zealand); and Brigadier Alfredo M. Santos (Senior Staff Officer). *On left*—Mr. Dulles, who attended the S.E.A.T.O. meetings, is accompanied by the Rev. Hector Harrison after a service at St. Andrew's Presbyterian Church. At the end of the Conference the Ministers said they were firm in the belief that important progress had been made in strengthening the Organisation.

THE AMERICAN VICE-PRESIDENT AT THE ETHIOPIAN COURT: The Emperor Haile Selassie converses with Mr. Richard Nixon in Addis Ababa. On the right of the Empress sits Mrs. Nixon. The Vice-President of the United States delivered a letter to the Emperor from President Eisenhower. Later in the day the American visitors were entertained at a State banquet in the Palace. It was reported that among the subjects discussed by Mr. Nixon while he was in the Ethiopian capital was United States aid for the coming fiscal year. The Vice-President and his wife visited Addis Ababa as part of their tour of Africa after attending the celebrations marking the independence of Ghana. From Ethiopia they flew to Khartoum.

AN AMERICAN AIRSHIP'S NEW WORLD RECORD: The U.S. Naval airship ZPG-2 is seen over Miami during its recent non-stop flight when it stayed in the air for 264 hours 16 minutes without refuelling. This beat by 64 hours 4 minutes its own previous international endurance record set up two years ago.

A DOUBLE ANNIVERSARY FOR THE POPE: His Holiness is seated on the throne on the left during a solemn pontifical Mass under the Central Dome in St. Peter's, Rome. It marked the eighteenth anniversary of Pope Pius XII's coronation, and also his eighty-first birthday. Cardinals and other high ecclesiastical officials were present at the celebration service.

Egypt Returns to Gaza

Nasser's Nominee Takes Over the Administration from the United Nations

THE EGYPTIAN GOVERNOR ENTERS GAZA IN TRIUMPH: General Latif, the civil Governor appointed by Colonel Nasser, acknowledges the applause of the crowd as he drives along a street in Gaza during his entry last week. He told a Press Conference that they could "write in block letters that the Egyptian administration was in power with effect from my arrival," and that Gaza would "return to quiet and calm as before the Israeli aggression."

On right—

THE EGYPTIAN FLAG IS RAISED: A dense throng watches as the Egyptian flag is raised over the civil Governor's office in Gaza. By last week-end much of the Gaza Strip had been handed over by United Nations forces to the Egyptians, routed from there by Israel last November.

ARAB DEMONSTRATIONS: Waving Egyptian flags and carrying an effigy of Mr. Ben-Gurion, demonstrators hail the arrival of the Egyptian civil Governor in Gaza. *On right—* Watched by U.N. troops, a crowd chants pro-Nasser slogans outside the U.N.E.F. headquarters.

THE GAZA FRONTIER

Israeli Border Dwellers Again Arm and Prepare Against Egyptian Raiders

Until last November the inhabitants just inside the Israeli frontier with the Gaza Strip had for long lived in a virtual state of war. Frequent raids by Egyptian commandos forced them to take the most stringent precautions. The men and women of the border settlement were always armed. At night searchlights lit up the area beyond the barbed-wire entanglements protecting their homes.

Welcome relaxation from this continual strain came when Israel invaded Sinai and occupied the Gaza Strip. The people of the Kibbutz (communal settlements) and other communities put away their arms and dismantled their searchlights and barbed-wire entanglements.

Then, at the beginning of this month, the Israelis withdrew. Within days the Israeli border people found themselves back in the tense conditions existing before November. The uncertainty regarding the powers and intentions of the United Nations Force in Gaza brought the return of the menace of raiders. So guns were slung again, searchlights manned, barbed wire re-erected. Once more the unceasing vigil had started.

AN ISRAELI BORDER SETTLEMENT LOOKS TO ITS DEFENCES: A slit trench has been dug outside the communal settlement at Einhashlosha, 1½ miles inside Israel from the frontier with the Gaza Strip. Behind the trench can be seen poles supporting barbed-wire entanglements. Since the Israeli withdrawal from Gaza, the border inhabitants are again preparing against Egyptian attack.

AN ARMED HERDSMAN: With a rifle slung on his shoulder he watches his cattle near the frontier. Such precautions were not needed while Israel occupied Gaza.

CLEANING THE GUNS: Weapons of various kinds are oiled and cleaned by four members of the Kibbutz at Einhashlosha. They have now returned to the precautions which were normal before Israel defeated Egypt.

PROTECTION BY SEARCHLIGHT: A man and girl prepare to start duty in a searchlight tower. Its beams rake the border during the night to discourage raiders.

EVEN THE NANNY IS ARMED: Children play under the eyes of their nurse, who is armed with a rifle. Life for those living in such settlements as this on the Israel-Gaza border is one of unceasing watch against Egyptian commandos. Recently Israel has complained to the Security Council of armed marauders crossing the frontier from Gaza.

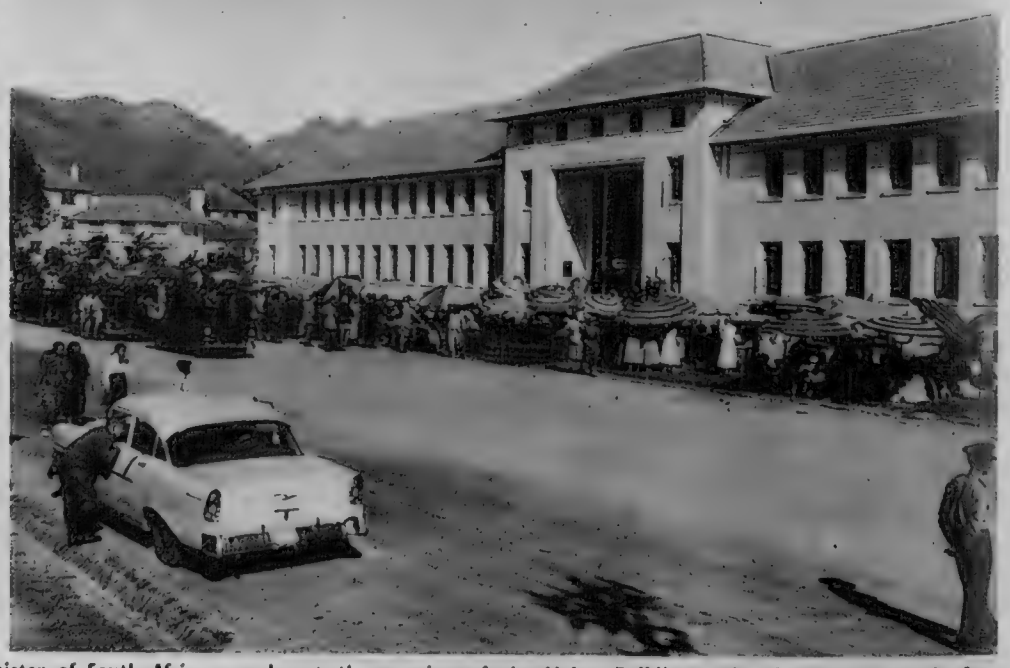
SPANS OF HORSES IN THE RING AT CAPE TOWN: Spectators crowd the rails to watch teams of horses being driven round the judging ring in the Annual Agricultural Show in the Goodwood showgrounds outside Cape Town. Judging in this event is based on individual appearance and how the horses match in their spans of eight.

MARES IN FOAL: They are led in a parade at the fifty-seventh Annual Show of the Western Province Agricultural Association on the showgrounds at Goodwood. The emphasis in this yearly occasion near Cape Town is on livestock. Besides horses, the entrants include mules, which are also judged in spans, and various classes of cattle and ponies. Great importance is attached to the sale of pedigree horses which takes place during the five days of the Cape Show.

A PRIZEWINNER: Mr. Bertie Louw, of Hermon, receives the Frank Connock Trophy for his mule team from the Governor-General of South Africa, Dr. the Hon. E. G. Jansen.

CAPE TOWN OCCASIONS

The Annual Cape Show, and the Malan Building at Stellenbosch University



A NEW UNIVERSITY BUILDING: *Left*—Dr. Malan, the former Prime Minister of South Africa, speaks at the opening of the Malan Building which has been named after him at Stellenbosch University, Cape Town. It will be used by the faculties of Anatomy and Physiology. Sitting on his left are Mrs. Strijdom; Dr. H. B. Thom, the Rector; Mr. Strijdom, the Prime Minister; and Professor R. W. Wilcocks, a former Rector. *Right*—The scene as the Malan Building is opened by Mr. Strijdom.

EARTHQUAKES IN GREECE

Many Thousands are made Homeless by Earthquakes in Thessaly, Northern Greece

AFTER THE EARTHQUAKES IN NORTHERN GREECE: Villagers search among the debris of their houses after earthquakes had struck Thessaly, in Northern Greece. An official report recorded two persons dead, 339 injured, and 6,000 buildings affected by tremors.

QUEEN FREDERIKA IN THE STRICKEN AREAS: The Queen of Greece speaks to villagers who lost their homes during the earthquakes. Queen Frederika was accompanied by King Paul.

Two people lost their lives, 339 were injured and 10,000 were rendered homeless by the severe earthquakes which struck Thessaly, in Northern Greece. Many people fled to the fields and spent the night in the open in cold and heavy rain. They were reluctant to return to their shattered homes for the tremors continued for a long time after the two major shocks which were responsible for most of the damage. The stronger shock was felt in the district of Farsala, 20 miles south of Larissa. In the nearby port of Volos 750 buildings were damaged, 250 of them seriously, including factories, cinemas and warehouses. Two thousand buildings were damaged in the Velestino area. There was also damage to a number in Larissa and Trikalla. In all, officials reckoned that more than 1,000 dwellings were wrecked in ten villages in the area of Farsala. As soon as the news of the disaster reached Athens, King Paul and Queen Frederika left for Volos aboard a destroyer to visit the stricken areas.

DESTRUCTION AT VOLOS: Damaged houses and debris after the second earthquake to strike Thessaly in a few hours. Athens Observatory registered over fifty post-earthquake shocks in Thessaly.

On left—

THE TRAIL OF DESTRUCTION: Half of a house and petrol station has collapsed, following the earth tremors in this small town in Northern Greece. Over 3,000 houses were destroyed and some 10,000 people rendered homeless.

A SCENE OF DESOLATION: Debris clutters the wrecked church in the village of Velestino. *On left—* A family sits outside its ruined house after the worst of the tremors had passed. Many families were reluctant to return home because of the shocks which continued after the two major quakes.

OIL SURVEYS IN THE CECILIA VALLEY OF THE ROCKY MOUNTAINS: A geologist uses binoculars from a ledge high above the valley during a recent oil survey carried out by the British Petroleum Company. While plans are being drawn up for the 1,500,000 tons a year refinery which British Petroleum is to build near Montreal, the Company, through its interests in the Triad Oil Company of Calgary, Alberta, is continuing oil explorations in Western Canada. A number of B.P. geologists and geophysicists have been lent to the Triad Oil Company, which has a large interest in 6,000,000 acres in Alberta, British Columbia, Saskatchewan and Manitoba. Apart from the seismic work carried out by the contractors, the Triad Oil Company has its own seismic party at present working in the Wildhay area, in the foothills of the Rockies between Alberta and British Columbia. The severe cold of Western Canada, the pine and spruce forests, and the presence of much swamp area demand field techniques vastly different from those required for the Company's more familiar operations in the Middle East. The geologists cannot do field work during the winter months from September to May, when snow covers the ground.

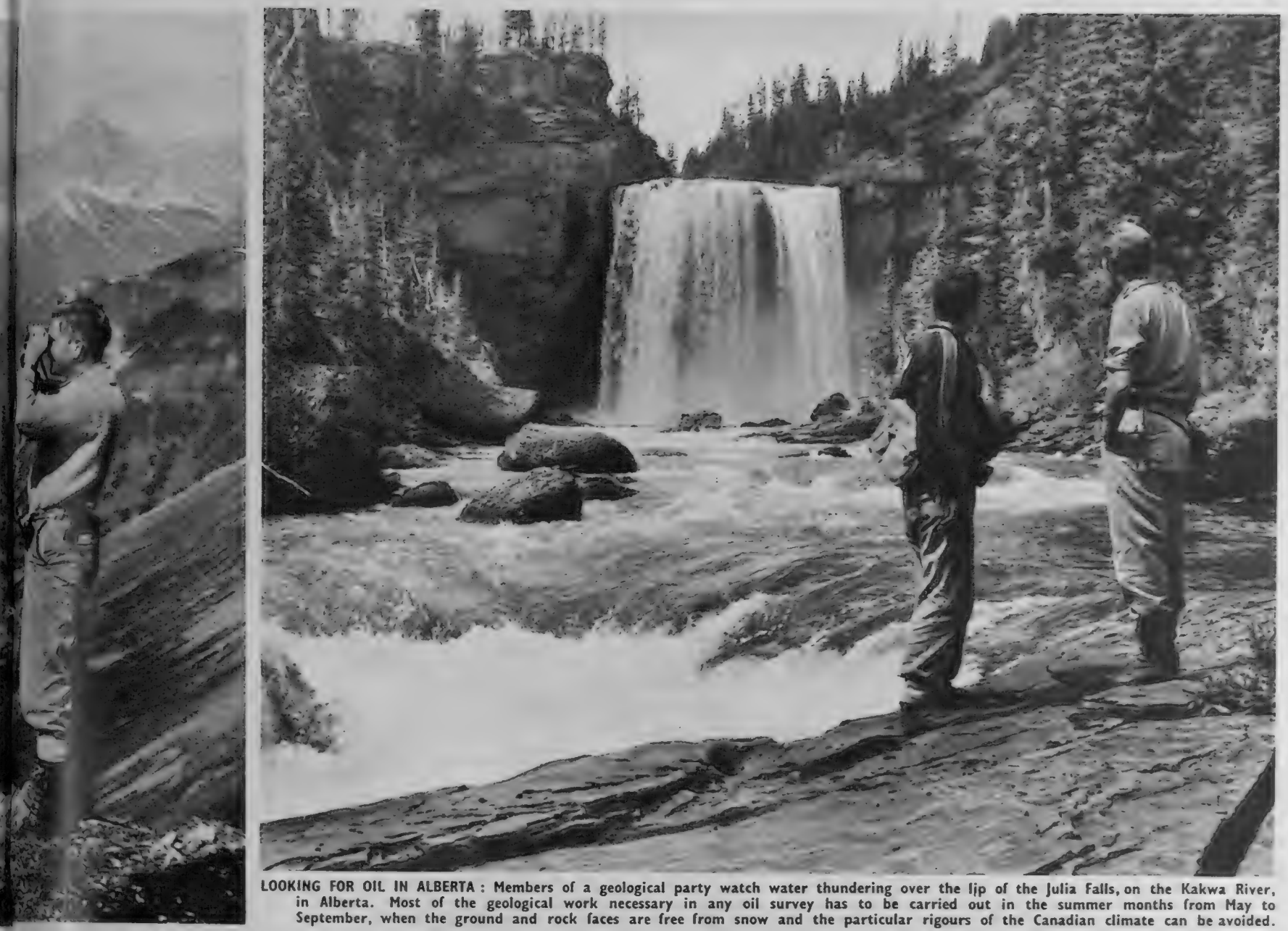
OIL EXPLORATION IN CANADA

The British Petroleum Company Carries Out a Survey in Western Canada

THE SECRETS OF THE ROCK FORMATIONS: A geologist examines an exposed rock structure during an oil survey in Northern Alberta. The geological survey is the first stage in the exploration. From the examination of outcrops the areas worth investigation are selected.

BY HORSE AND HELICOPTER: An oil survey party is seen with pack-horses and a helicopter at an area known as Stinking Springs, in Northern Alberta. The nature of the terrain demands that many of the conventional methods of transport have to be abandoned in these regions.

A TEMPORARY BREAKDOWN IN THE TRANSPORT SYSTEM: Two members of a Triad Oil Company survey party have an awkward moment with a frisky pack-horse. In the mountainous regions these hardy beasts are invaluable.



LOOKING FOR OIL IN ALBERTA : Members of a geological party watch water thundering over the lip of the Julia Falls, on the Kakwa River, in Alberta. Most of the geological work necessary in any oil survey has to be carried out in the summer months from May to September, when the ground and rock faces are free from snow and the particular rigours of the Canadian climate can be avoided.

A GEOLOGICAL PARTY ON THE MARCH : A long line of pack-horses crosses the Sulphur River in Alberta as an oil survey party goes about its work. The geologists in the party will look for outcrops of rock which might point to oil-bearing areas, while the geophysicists will investigate possible areas under earth layers or patches of swamp. The latter's task is to obtain information about the size and shape of rock surfaces which might hold oil under the ground and are not visible on the surface.

THE CAMBRIDGE UNIVERSITY CREW IN A PRACTICE ROW AT HAMMERSMITH BRIDGE: The crew are M. H. Bartlett (Radley and Peterhouse), bow; C. J. Pumphrey (Winchester and Magdalene); J. A. Pitchford (Tonbridge and Christ's); T. P. A. Norman (Eton and First and Third Trinity); J. R. Meadows (Yale University and Jesus); M. G. Delahooke (U.C.S. and Jesus); R. J. Thompson (Radley and Pembroke); C. F. S. Clayre (Dean Close and Queens'), stroke; R. C. Milton (Harvard University and Emmanuel), cox. Their coaching on the Tideway this year is in the hands of Mr. D. H. Mays-Smith. Before coming to London they had spent a period at Henley. Throughout their training the Light Blues have been showing steady progress in their style, which is more conventional than Oxford's.

TRAINING FOR THE BOAT RACE

Preparations for a Clash of Styles on the Tideway

In the past Cambridge have usually been the innovators in University rowing. From Cambridge came the Fairbairn, or Jesus style and the C.U.B.C. was the first to change from fixed pins to swivels during the boat races of the 1930's. However, this year it is Oxford who have come into the news by undertaking a bold experiment. R. H. Carnegie, the Australian President of the O.U.B.C., has no doubt watched, like many others, the recent decline in English rowing in competition with Continental and American crews. He seems to have come to the conclusion that some of the reasons for the success of United States and Soviet eights may lie in the construction of their boats. At all events the Dark Blues have bravely decided to try out a new style of boat on the tideway.

Briefly, the experiment consists of having so-called American rig and slides to the seats which run further forward than usual. This means that without overswinging the crew should be able to come forward to the position of greatest strength for the beginning of the stroke. It follows, argue the experimentalists, that the oarsmen take hold of the water further behind the rigger and that the maximum sustained pressure is reached at a slightly earlier point than usual. Thus, it is claimed, the boat moves faster. Critics of this method maintain that there is great danger of a short finish which gives away the benefit of the strong beginning. The rights of the matter will be seen in the race next week, for Cambridge are abiding by the more orthodox principles which have stood them in good stead in the great majority of races since 1946.

However, whatever the outcome next Saturday (March 30), it is to be hoped that Oxford will not lightly drop an experiment which may do much to revive English rowing. In their coach on the tideway, Mr. J. H. Page, the Dark Blues have one of the most eminent of English rowing experts. It is certain that neither he nor the O.U.B.C. President would have embarked on so controversial a system without carefully considering all the advantages and disadvantages.

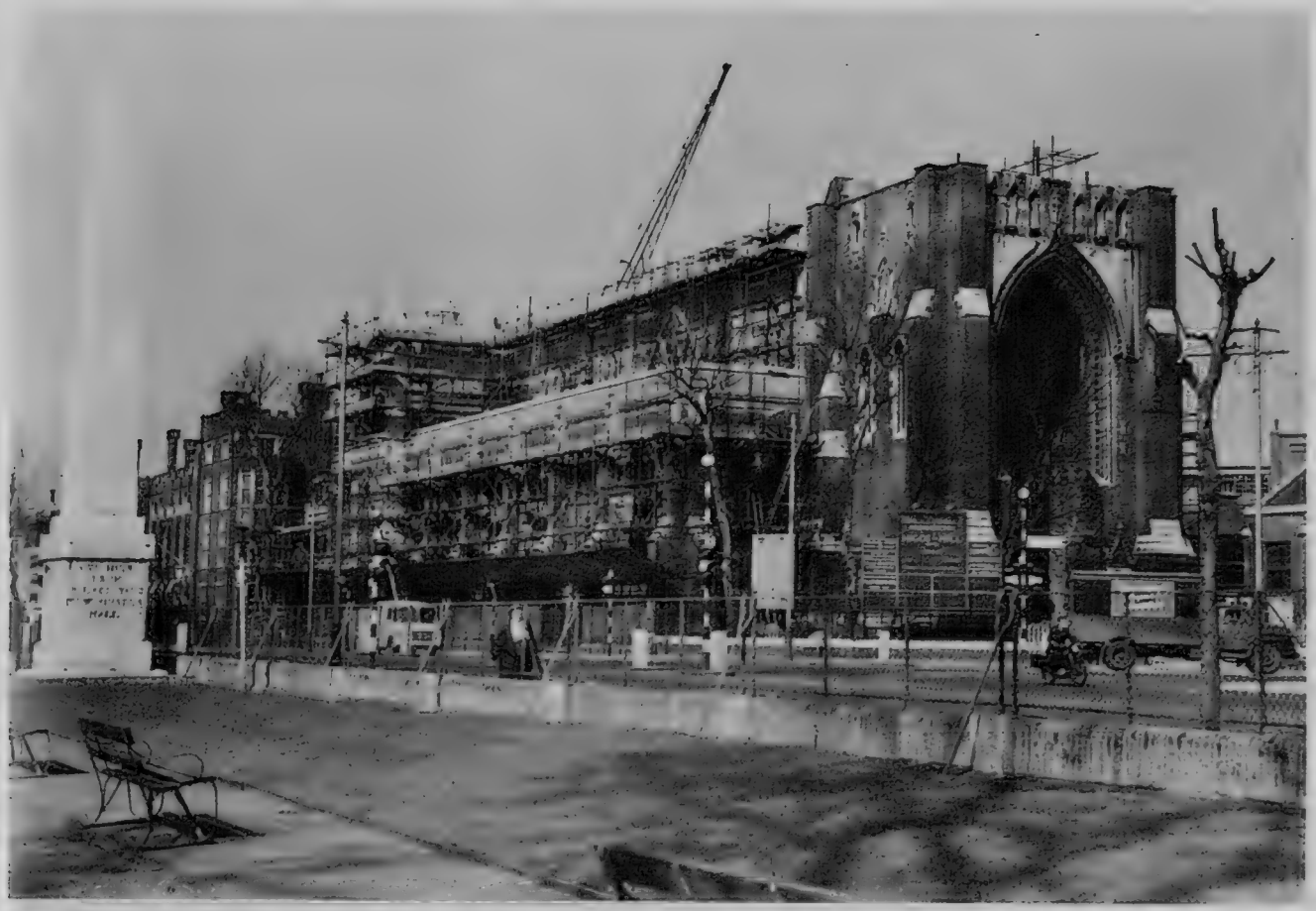
COX FROM PAKISTAN: A. Said is the first Pakistani to take part in the Boat Race.

OXFORD IN THEIR NEW-STYLE BOAT: The Dark Blues are: G. Sorrell (St. Paul's and Christ Church), bow; S. F. A. Miskin (St. Paul's and University); R. L. Howard (Shrewsbury and Worcester); A. H. Stearns (Bedford and Merton); B. F. Barnard (Eton and Christ Church); R. Barrett (St. Edward's and Pembroke); R. H. Carnegie (Geelong, Melbourne University and New College); K. L. Mason (K.C.S. Wimbledon and Queen's), stroke; A. Said (Peshawar University and Pembroke), cox. Oxford are in the limelight on the Tideway because of their experimental boat, which has American rig and longer slides forward. As can be seen from this picture of the crew, the rig has two stays compared with the conventional five stays in the Light Blues' boat.

Rebuilding Pugin's Cathedral

Restoration Continues on St. George's Cathedral, Southwark

In the reconstruction of St. George's Cathedral, Southwark, the architects are following the essential lines of the original design by Pugin. There will be several notable improvements, however, the major one being the inclusion of what Pugin called an "indispensable cathedral feature," namely, a clerestory, with windows high above the nave. This feature was omitted in the original structure because of lack of funds at the time of building. At a future date it is also proposed to raise the West Tower by at least 120 ft. The president of the Reconstruction Fund is the Duke of Norfolk and the chairman is Rear-Admiral Sir Matthew Slattery, C.B., R.N. (Retd.). When the work of rebuilding began in 1953 the restoration fund stood at £260,000, of which £198,000 had been given by the War Damage Commission. Since the total estimated cost of restoring the Cathedral was put at £600,000, it was decided that only the essential structure would be tackled at present.



ST. GEORGE'S, SOUTHWARK, RISES FROM ITS WEB OF SCAFFOLDING: The Roman Catholic Cathedral, which was destroyed during an air raid in 1941, is at present being restored to its former glory. The original structure was the work of Augustus Pugin, and was erected in the 1840's. It was the first large church to be built in London following the Catholic Emancipation Act of 1829. The estimated cost of the present restoration work is in the neighbourhood of £600,000. Since the available funds do not reach this figure, only the essential main structure is being rebuilt at the moment.

THE ARCHES OF THE NEW CATHEDRAL: In the reconstruction, Painswick stone from Gloucestershire is being used for the interior of the Cathedral and Portland stone for the exterior facings.

INSIDE THE NEW CATHEDRAL: The central nave of the Cathedral begins to take shape under its web of scaffolding. This picture was taken looking towards the Sanctuary. The Chapel of the Blessed Sacrament is on the left of the nave, and on the right are Our Lady's Chapel, the Relics Chapel and the Sacristy. *On right*—The North aisle leads to the Chapel of the Blessed Sacrament. The architects engaged in the work of restoration are following Pugin's plan, but with certain improvements.

A BAUXITE MILL IN BRITISH GUIANA: It is situated on the banks of the Demerara River. For some years large quantities of bauxite have been exported to Canada. Now a Canadian firm is building a plant by the river in British Guiana for the production of alumina, another essential for the making of aluminium.

COMMONWEALTH CO-OPERATION

British Guiana and Jamaica Combine with Canada in the Large-scale Production of Aluminium

An economic link between Canada and British Guiana and the West Indies is to be seen in the development of alumina production to feed the aluminium smelting plants at Kitimat, British Columbia, and in Quebec province.

British Guiana, which will feed the Quebec plants, has had a bauxite-extracting industry for many years. Now a £12,000,000 plant is being built for a subsidiary of Aluminium Ltd., of Montreal, to produce alumina (aluminium oxide, the intermediate product in the metallurgy of aluminium). Its capacity will be 250,000 tons of alumina a year from 500,000 tons of bauxite.

In Jamaica, the industry dates only from World War II, when extraction of low-grade Jamaican bauxite was encouraged by wartime needs. Three companies are operating—Reynolds and Kaiser (both American) and Alumina Jamaica Ltd., another subsidiary of Aluminium Ltd. The American companies ship bauxite to the United States for processing, but the Canadian-owned company produces alumina in Jamaica.

To keep pace with the needs of Kitimat and of the Scandinavian market, which Jamaica also supplies, production at Kirkvine, near Mandeville, was raised from 230,000 tons a year to 300,000 tons in 1955, and is now being increased to 550,000 tons. A second plant is being built near Ewarton, about 50 miles away, to produce 240,000 tons a year. The Canadian investment in Jamaica will exceed £33,000,000 when these extensions are completed.

The impact of the operations on Jamaica has been greater than might be supposed from the relatively low labour needs of an extraction industry. In the first place, expansion has been almost continuous and this has employed substantial numbers. In the second, Alumina Jamaica engages in extensive agriculture on the 30,000 acres it holds.

When the present expansion is complete the company will be spending £3,000,000 a year on wages and local payments, other than considerable payments to the Government of royalties and taxes. It may thus prove an important source of income for the new Caribbean Federation.

A NEW JAMAICAN PORT WHICH HAS BEEN BUILT FOR THE ALUMINA TRADE WITH CANADA: The mid-twentieth-century harbour and installations at Esquivel have cost nearly £3,000,000 to construct. The port's main purpose is to handle the alumina trade to Canada, but molasses are also shipped from its docks.

AGRICULTURE AS WELL AS INDUSTRY: The alumina factory at Kirkvine, in employ industrial workers. It owns the agricultural land which surro pastureland and fields for livestock. There are also citrus groves and s

AN ALUMINA PLANT IN JAMAICA WHICH IS DOUBLING ITS OUTPUT: At Kirkvine, near Mandeville, the factory, which belongs to Alumina Jamaica Ltd., is stepping up its production to 550,000 tons a year, which is double the output of two years ago. A new plant is being built at Ewarton, 50 miles away, to produce annually a further 240,000 tons of alumina.

ca, of Aluminium Ltd., of Montreal, does much more than it. This large area contains extensive timber plantations, 2,800 acres are leased to tenants for basic food production.

THE MODERN EL DORADO: The bauxite mill by the Demerara River, in British Guiana, exploits the mineral, in which the country abounds, for the aluminium factories of Canada. When the new plant for alumina production is completed nearby, Guiana will greatly profit and may turn out after all to be the El Dorado for which Sir Walter Raleigh vainly sought.

MUSEUM MOULDERS

Making Plaster Casts of the Exhibits at the British Museum

The moulder's shop at the British Museum, in London, was established in the early nineteenth century to make plaster casts of the Museum's valuable collection of sculptures, reliefs and friezes. In the beginning it was run by the craftsmen who carried out the work for the Museum, and it was not until the 1840's that it was taken over by the Museum authorities. To-day it is housed in a building at the back of the Museum and the head of the department is forty-four-year-old Mr. Samuel Morgan. He has a staff of four and they can make exact copies of any of the Museum's collection. As well as making the casts they reproduce the colours of the original exhibits. This is particularly difficult in the case of bronzes which have been stained by centuries of contact with damp earth.

Most of the enquiries for copies of the museum pieces are received from art galleries, schools and other museums throughout the world. Although Classical Greek sculpture is most in demand, enquiries are received for many other types of work. There are thousands of moulds in the Museum's vaults, but the moulders are continually making new ones to meet the demand. They are familiar with the handling of many materials, including bronze, stone, ivory and terracotta.

THE MOULDER'S SHOP OF THE BRITISH MUSEUM: Work is in progress under the direction of Mr. Samuel Morgan (right), who is making a plaster cast of the Elgin Marbles. Centre is Mr. Peter van Geersdaele, working on a head of Homer, and on left is Mr. Jack Prescott with a head of Cæsar. Behind the head of Homer is Mr. Prescott's son.

PLASTER CASTS ARE PREPARED FOR OVERSEAS CUSTOMERS: *Left*—Mr. Jack Prescott, Jnr., is examining a plaster cast, which is to be sent to Sweden, of the prow of a boat. *Right*—He is removing mould marks from a cast of a statue of Aphrodite which was found at Ostia. The original was in marble, and this copy is intended for a Government School of Art in the Punjab.

A VETERAN MOULDER: Seventy-one-year-old Mr. Jack Prescott, who has been doing this work for fifty years, is colouring the cast of an Ife head, the original of which, in bronze, is on the right.

THE HEAD OF THE MUSEUM'S MOULDER'S SHOP: Mr. Samuel Morgan is removing a Benin head from a gelatine mould. He has a staff of four to assist him in the shop. Mr. Morgan has been making casts since he was fifteen years old, when he started work at the Victoria and Albert Museum. He says that moulding is now a dying craft as there are fewer young workers. *On left*—Peter van Geersdaele is removing mould marks from one of a group of plaster casts of Benin heads. The copies are going to a customer in Nigeria. The moulder's shop is not open to the public and the casts are not put up for sale in the Museum. Enquiries for casts are received from all parts of the world.

THE HAREWOOD SILVER AUCTIONED AT CHRISTIE'S: Mr. Chance, the auctioneer, asks for bids as a pair of George III small circular dishes, with gadrooned rims and the borders engraved with the Lascelles arms, are put up for auction during the sale authorised by the Princess Royal and the Earl of Harewood. The pair fetched £210. The total for the first day of the sale was £22,816.

THE PRINCESS ROYAL'S SILVER

Early Silver Belonging to the Princess Royal and the Earl of Harewood is Sold at Christie's

The highest price of £7,000 at the Christie's Sale of the Harewood silver was paid for a rare Charles II toilet service of 1683, consisting of fourteen pieces decorated with Chinese figures, birds, trees and foliage. A large amount was also given for other lots of lesser importance. A pair of George II small silver-gilt candelabra in the form of Negro slaves, the work of John Pero, 1733, fetched £2,200, and an inkstand by Edward Feline, 1741, made £1,000. Both items were bought by Asprey. A Paul Storr soup tureen and cover, 1814, sold for £550 and another pair of tureens by Thomas Robins, 1808, went for £880. Other lots which fetched good prices were a Queen Anne silver-gilt communion cup of 1702 (£520), a sugar bowl and cover of 1704 (£480), a large oval cake basket with pierced foliage sides, 1749 (£600), and a second inkstand by Edward Feline, 1750 (£520). The 109 lots of early silver which came up for auction on the first day of the sale fetched a total of £22,816. The second part of the sale, which took place two days later, consisted of the auctioning of snuff-boxes and other small articles, also from the collection of the Princess Royal and the Earl of Harewood.

SOME OF THE LOTS ON DISPLAY: An attendant holds a George III oval meat dish, with gadrooned rim and engraved with the Lascelles arms. It was made by William Fountain in 1800.

DURING THE AUCTION IN THE SALES ROOM: A prospective buyer examines one of the lots during the sale. A second part of the sale was held two days after the auctioning of the silver, when old English silver sporting snuff-boxes, a group of fine enamel watches and assorted objects of art and virtu came under the hammer.

THE DILEMMA OF MONARCHY

The Royal Family has to Please Everyone

By JOHN GORE

COURT PROTOCOL.—The present-day strength and popularity of our Monarchy owes much to the unique fact that since 1837 a succession of Sovereigns have always managed very quickly exactly to fit the role of what a Sovereign should be in changed circumstances and the nation's current manner of thought at the moment of accession. More, they have usually managed to adjust themselves to continuing evolution all through their reigns. The young Queen Victoria on accession was hailed as the herald of a new era of dignity and purity in Court life, and if she became rigid in widowhood she had built up such a legend as enabled her just to conserve to the very end her greatness and "rightness." She was an "institution" in her person and she established the Monarchy as a prized institution which her successors ever more firmly cemented. King Edward all through his short reign was exactly the Sovereign to adorn the flamboyant and glittering age which ended in the social upheavals of our time. George V and his son, George VI, both called to the Throne without education *ad hoc*, instantly fitted the roles of their times and constantly adapted themselves to swiftly-changing conditions and manner of thought. And Queen Elizabeth II, educated *ad hoc* in the best of schools, has already clearly shown that this unique succession is unchanged. Once again the ever-new role has found the star performer who has made the old drama as fresh as in 1837.

But communications are not the only thing that has breath-takingly quickened since the young Victoria reigned. The revolutions of our time have played havoc with the British character. The old *laissez-faire*, the old conservatism, the old grumbling obedience to custom, law and order, the old unquestioning patience under social anomalies, are gone, and to-day the Monarchy, as popular and as firmly rooted as ever it was since Victoria's Jubilee, is made aware of a polite and respectful questioning of certain continuing Court conventions and "protocol," the latter a word which has suddenly become specially applicable to Court ceremonial conventions.

Every one of these admirable Sovereigns in this remarkable succession has been faced with the same dilemma: how to achieve a double purpose—to maintain the traditional splendour and dignity of the Monarchy and at the same time to satisfy the demands of a new Democracy and a continuing austerity which, some think, require the abolition of class distinctions, and of a privileged buffer state of aristocracy.

The Dilemma.—The splendour and sprawl of Queen Victoria's Empire, if not "one with Nineveh and Tyre," are sadly truncated to-day, and that truth no doubt raises the question in some minds of whether the splendid trappings of Monarchy to-day and Court adherence to the ceremonial and "protocol" of the "great days" are outworn and should be somewhat pruned and democratised to suit the age we live in. Such questionings are minority, small minority, voices, but they are none the less heard, and quite certainly the Court, in its elasticity and good sense and inherent respect for democracy, turns no deaf ear to it.

Take this example from the *Manchester Guardian*, cited because it is written in restraint and with respect and admiration:

> It would certainly be a pity if, for the sake of keeping up or extending the ceremonial splendours, the less formal occasions were neglected. To end the presentation parties and the snobbery that goes with them would entail no loss . . .

That paragraph expresses this gentle minority voice, as it underlines the dilemma and the difficulty of solving the Sovereign's "double purpose" to the Commonwealth's satisfaction.

There *is* snobbery in protocol, of course, but we must remember that presentation parties (to take a diminutive instance) are by no means privileged occasions as in King Edward's reign. Australians, Canadians, Americans and more classes than one in Britain enjoy them and would be sorry to see them go. Yet, though the dilemma is real and the problem difficult to solve, I have not much doubt that in the next decade we shall have clear proof that it is being tackled realistically and perhaps drastically.

Historical Pointers.—It is instructive to turn back the pages of history and to examine what were the public's reactions to any attempts by their Sovereigns in the last century and more to wriggle out of protocol and ceremonial. I suppose William IV and Queen Victoria (in the first years of her widowhood) would be cited as examples of modern Sovereigns who for different reasons were prepared to "contract out." William IV, the simple, bluff old sailor, was all for informality. The public came to regard him as an oddity and made more or less good-humoured fun of him.

Very different was the public and ministerial reception of Queen Victoria's efforts to "contract out," and in her egotistical personal sorrow to evade her ceremonial duties. In her Ministers it raised acute anxiety; in the public hardly-suppressed anger, and indeed at one time it brought the Monarchy near to foundering. King Edward loved and valued, adhered to and enlarged, protocol and ceremonial. His son, King George V, often expressed in private, and frankly enough, his boredom with ceremonial, and valued very highly every opportunity he was able to enjoy of informality and private life. But he had too much reverence for his father's kingcraft and too much reverence for the Monarchy to practise in public what he preached in private.

His common sense always triumphed over his explosive moods and heady utterances, and his own kingcraft was, in its way and in his time, the equal of his father's. He fully realised the likely effect on the Monarchy (in his time of transition from aristocratic to democratic government) of any dilution of ceremonial and protocol; and the historical instances were made familiar to him. As one example, his wise Private Secretary, Bigge, took quite a serious view of the King's long occupation of the inconvenient cottage at Sandringham while his mother lived on in the big house.

ROYAL INTEREST IN INDUSTRY AND SCIENCE: Prince Philip goes aboard the motor yacht *Navigator* during his recent visit to the Decca Radar Establishment at Malden, in Surrey. Behind him is Mr. E. R. Lewis, chairman of the Decca Group of Companies. *Navigator* is a demonstration vessel for radar and navigational aids. This picture is one of many current examples of the trend towards informality in Royal occasions.

Economy and Informality.—Nowadays perhaps that decision would be hailed as a kingly and important practical example of economy in austerity, an economy which all too many of his subjects who are landowners have been compelled to follow. Indeed, to-day the Royal residences, in their size and number, must be an economic problem to the Court with its four or five immense Palaces in the London area and small and great houses in England and Scotland. Even the generous distribution of "grace and favour" lodgings in the precincts cannot greatly ease that economic problem, and no doubt the voice of mild criticism is sometimes heard when some of these residences are enlarged or too constantly redecorated and modernised.

But the nation as a whole is worlds away from wishing for Monarchy on the cheap. It is perhaps a little more inclined to concern itself with a more equitable and appropriate balance between traditional ceremonial and informal occasions, and with increasing the Sovereign's contacts with business and industrial and scientific personalities in management and among employees at the expense of the traditional buffer state of aristocracy and hierarchy once regarded as a necessary prop of the dignity of the Monarchy on formal occasions.

Very early in their reign, King George V and Queen Mary clearly recognised this desirable break with tradition; they made a series of tours of industrial areas, insisting on informality; and already historians have hailed it as an important and wise decision, a "striking-out of a new line" credited to the personal decision of an untried Sovereign. Since then, their "new line" has become common form and has largely increased the scope and strain of Royal functions. It is along these lines perhaps that the nation will first become aware of a swifter evolution from protocol and traditional ceremonial to ever more realistic and democratic contact between the Court and the institutions which to-day are vital to our survival as a leading nation.

I feel no doubt that in the next few years we shall increasingly find the Royal Family in informal contact with business-men, scientists and industrialists; and, even during the most formal occasions, such as the State visits of foreign Sovereigns and Presidents, observe these new V.I.P.s taking the places of some of the customary "seeded" aristocracy hitherto alone deemed fit for right conduct on these cast-iron occasions of protocol. Indeed, there seems no good reason why the State visit of a foreign Sovereign should not be varied to include more interesting and realistic functions than a gala performance at the opera and a State banquet or two, though naturally the London public has no desire to be robbed of its pleasure in a Royal procession through the streets.

Exploitation.—It must be clear to most educated people that such criticism as exists (and it is trivial) of adherence to Court protocol and outworn tradition is not a slow stirring of public opinion but to a large extent an exploitation by a small section of the Press; and whether that exploitation is solely a stunt in the ceaseless campaign to increase circulation or is the vengeance of some Press boss with an imagined grievance against the Court or its hereditary office-holders, it need not be taken very seriously. For if the sensational Press which too often criticises the Court justifies its intrusive criticism by the plea of the nation's over-mastering interest in the lives and well-being of its Royal house, that interest *is* real and unshaken even if the justification for intrusion is specious.

If that justification were not specious, those proprietors and editors who indulge in intrusion into the private lives and affairs of public people generally would soon discover that it has the effect of shutting rather than opening doors and inevitably puts the victims on the defensive. It is entirely due to the outrageous probings into the private affairs of the Royal Family by a small section of the Press that there are occasional criticisms that the Court Public Relations officials are not sufficiently co-operative in satisfying reasonable public curiosity and interest.

The Monarchy was no stranger to rough treatment by the Press in the reign of George III, George IV and William IV. If it died down somewhat in the years of Queen Victoria's married life, there was a sharp recurrence in the first years of her widowhood. But from the Jubilee of 1887 the Monarchy has become increasingly an institution too admirable and too firmly enthroned in public respect to be an open target for criticism. Instead it is to-day the victim of insidious attack and veiled innuendo by a handful of gamins whose sole interest is mercenary.

Museum Pieces.—For my part, I am far from holding that all our institutions and traditional practices are perfect or fit or proper for the age we live in. Whoever it was who first coined the phrase, "Hats off to the past, coats off for the present," I applaud his aphorism. There is a great deal of junk and many museum pieces ripe to be cleared away, and they range from the Second Chamber's composition, the continued creation of unnecessary hereditary titles, the still-lopsided and redundant Honours Lists down to the absurdities o Victorian ceremonial dress in an age of streamlined cars, of jet planes and of atomic power. I have no doubt at all that our present Sovereign needs no prompting from irresponsible sensation-mongers to move with the times, as did her great-grandfather, grandfather and father, never losing sight of that double loyalty—the dignity of the Monarchy and the reasonable claims of democracy—and that during her reign the Monarchy will evolve in step with the nation's evolution, as it has done to general satisfaction for a century and more. We work our Sovereigns pretty hard. Even during their holidays they are not divorced from their offices and red boxes, and their "office hours" are longer than most busy Civil Servants' hours. It seems reasonable as well as sympathetic to allow them freedom from outside advice in choosing their own friends and recreations. I myself set some store on that article in the Rights of Man.

NOW OWNED BY THE NATION: Looking northwards from Chapel Porth Cove towards Tubby's Head, on the north coast of Cornwall, near St. Agnes. On the cliffs are disused mining installations.

The National Trust recently announced the acquisition of St. Agnes Beacon and a large area of adjoining coastal land on the north coast of Cornwall. St. Agnes Beacon, which is about four miles south-west of Perranporth, is a heath-covered hill rising to 629 ft. and is the principal feature of this part of the county. From it there are fine views of the coast between Carn Naun Point, west of St. Ives, and Trevose Head, near Padstow, and over much of inland Cornwall.

In addition the Trust has bought 362 acres of cliffland and wild moorland surrounding Chapel Coombe, a rugged valley leading down to the small cove of Chapel Porth. This area includes a mile and a half of the coast from a point south of St. Agnes Head to Porthtowan. From Tubby's Head there are fine views to the south along two miles of fresh yellow sands.

On the cliffs are the engine houses of the disused tin and copper mines known as Wheal Coates, Wheal Charlotte and Charlotte United. The Towanroath mine shaft of Wheal Coates is spectacularly sited, being perched on a ledge in the cliffside. A motor road leads from St. Agnes to Chapel Porth, and there is access on foot to the whole area.

CORNWALL'S COAST VIEWED FROM ST. AGNES BEACON: Disused mine buildings can be clearly seen on the coastline in the centre of the picture; to the left is Chapel Porth. From St. Agnes Beacon, a hill rising to 629 ft., there are magnificent views over twenty-six miles of coast between Carn Naun Point, west of St. Ives, and Trevose Head, near Padstow, and over much of inland Cornwall.

CLIFFS AND HEATH FOR THE NATION

The National Trust's Latest Acquisitions in Cornwall

On left—

"HORSES LEAP," BETWEEN ST. IVES AND LAND'S END, CORNWALL: St. Ives Town Council at one time proposed to tip rubbish into the sea from this point. The idea met with considerable opposition, however, and was turned down by the County Planning Authority. Recently, Mr. John Husband, of Consols Farm, St. Ives, sold the 24 acres of land and the cliff to the National Trust. Even before this acquisition, the National Trust had property on both sides of St. Ives Bay, including a stretch of five miles of cliff and farmland on the east side.

IN THE FEDERAL CAPITAL OF PAKISTAN: Modern buildings surround this broad street in the centre of Karachi. Since the Partition of India in 1947, when the city became the capital of Pakistan, its population has increased from 350,000 to 1,200,000. A large number of the new inhabitants are said to be refugees from India. Karachi has therefore had to expand in a dual role—to develop as one of the nine capital cities of the British Commonwealth and to plan a policy for housing the refugees.

CONTRAST IN KARACHI

Pakistan's Expanding Capital Contrasts Fine Buildings with Slum Areas of Refugees

HOMES OF THE HOMELESS: Shanties, cabins and huts built, for the most part, of scrap such as sacking, paper boards, corrugated iron or occasional bricks are the dwelling places of the army of refugees which has settled in Karachi since the Partition of India. The municipal authorities are making great efforts to rehouse these people.

THE FUTURE GENERATION: slum quarter of Karachi from becoming problem

One of the consequences of the partition of the Indian sub-continent into the States of India and Pakistan has been a continual flow of refugees between the two countries. This was inevitable once the project for some form of Federal Government for the whole area proved unacceptable to the Hindus and the Muslims. In drawing the frontiers of the two countries some sections of the new populations had to become minorities.

The refugees cross from India into Pakistan and from Pakistan into India. From time to time allegations are made in Delhi or Karachi that they are forced into one country by the bad conditions of living and repression in the other. Whatever may be the reasons, their numbers are alarmingly high. In the Governments of both states will be found Ministers for Rehabilitation. (In Pakistan the portfolio is for Refugees as well.) This is evidence that the two countries are determined to care for the welfare of the refugees and give them hope for the future.

In Karachi can be seen what is being done for some of the refugees in Pakistan. The city is the Federal capital. (It must be remembered that Pakistan suffers from being partitioned within itself, East Pakistan being separated from West Pakistan by a vast tract of India.)

As the capital Karachi has assumed great importance in the past ten years. It has, in fact, become one of the major cities of the world. Previous to 1947, it had been very considerably developed by the British. When Sir Charles Napier became the first Governor in 1843, it was no more than a small community of traders and its chief claim to fame was that it was believed to have been visited by the Greeks in the distant times of Alexander the Great.

First impressions of Karachi to-day are of a flourishing city which is still expanding. In the centre there are many new buildings and broad streets. Off these thoroughfares run narrow byways presenting, with their bazaars and markets, a typical Oriental scene. Karachi is often a city of contrasts. Overhead the latest types of airliners head for the airport. On the ground high-powered cars speed along the streets. But these latter make their way through donkey carts, camels and rickshaws.

Without the refugees the municipal authorities would have many of the problems usually associated with a rapidly growing community. With the refugees they have extra difficulties. In ten years the total population of Karachi is said to have risen from 350,000 to 1,200,000. This increase by more than three times is due in considerable measure to the influx of refugees from India. Reliable figures are not easy to ascertain. But it is possible that some 500,000 of the inhabitants of Karachi can be grouped in the "homeless" class. For these people the two urgent needs are houses and work. No one in Karachi denies that at present the bulk of the refugees has to live in appalling conditions—crammed into the slums of shanty towns of rickety huts. But every effort is being made to rehouse them in decent circumstances as quickly as possible.

Employment presents another problem. In the Partition most of the existing industry went into India. Pakistan has had to build up most of its own industrial potential. Many new factories have arisen and two hydro-electric plants installed.

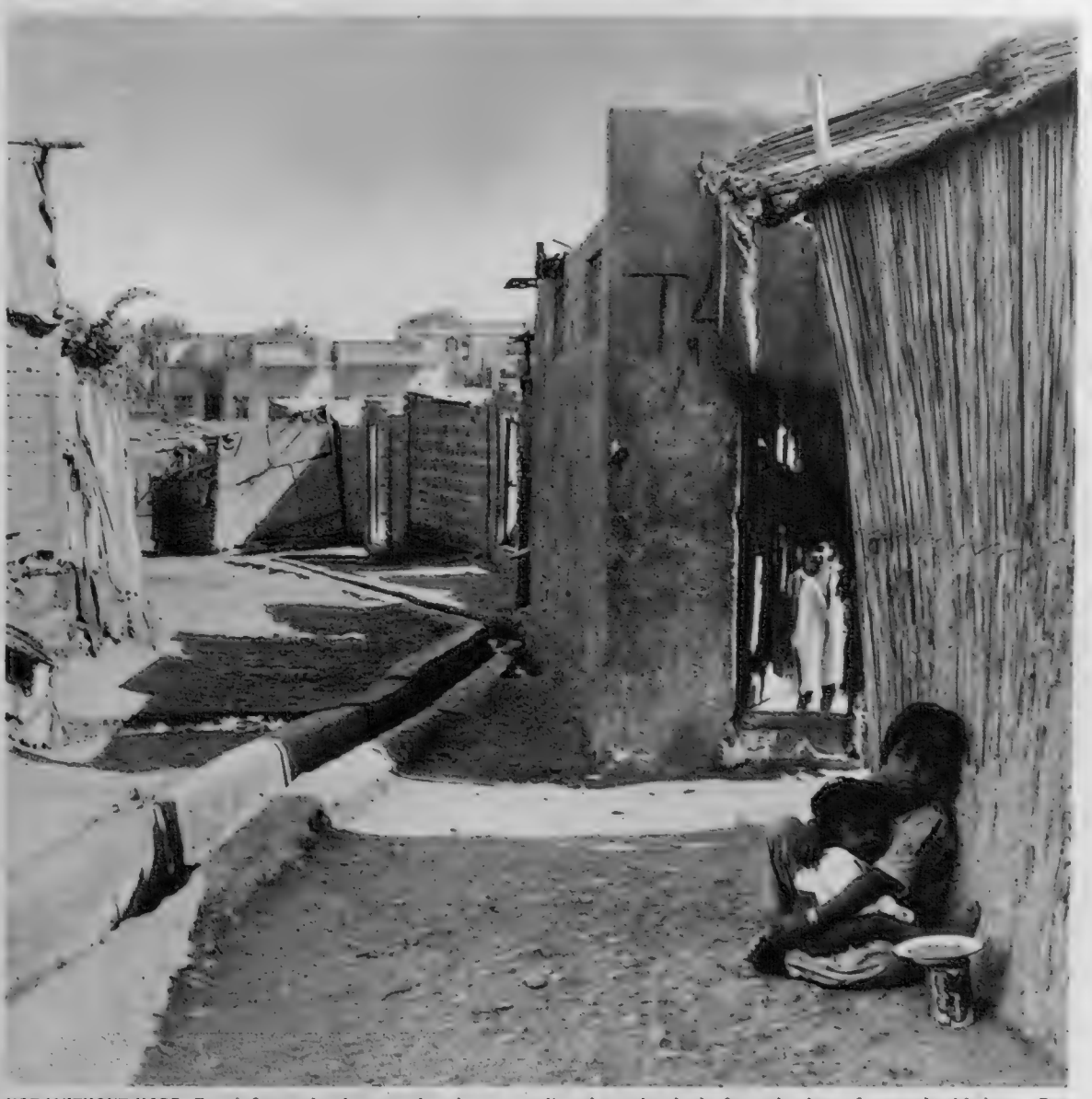
The refugees are a labour force ready to hand. If one accepts the figure of 8,000,000 refugees having entered the

A BAZAAR IN KARACHI : The scene is typical of the traditional Orient. The traffic consists of camel and bicycle transport threading through the crowd examining the wares displayed on the stalls. But this narrow street is close to a broad avenue along which there is a constant flow of cars, buses and trams. In the capital of Pakistan are the residence of the Governor-General, the Parliament House and other fine public buildings. There are also vast areas of slums inhabited by refugees.

An old teacher sits surrounded by refugee children in a There is much determination to prevent these youngsters children and to fit them to become full citizens of Pakistan.

country since 1947, it would seem that about three-quarters of them are agricultural peasants and have been, or are being, settled on the land. The remaining 2,000,000, however, must look to their future in industry. The Pakistanis are confident that they can fit this very large army of workers into employment alongside their own native population.

At the moment there are few signs of the trek of refugees stopping. This could only be achieved by more stable political conditions. Both the Indian and the Pakistani Governments have often called on minority communities to remain within their borders and given assurances of fair treatment for them. But the refugee problem will probably remain as long as there is tension between the two states. With the critical situation over Kashmir there seems little likelihood of the tension being lessened in the near future.



NOT WITHOUT HOPE: Two infants play by a mud and straw wall and another looks from the door of a ramshackle hut. But it is not intended that they shall always live in such conditions. Partition has meant an influx of refugees into both Pakistan and India. Only a relaxation of the political tension between the two countries can really solve this problem.

DEVELOPMENT ON THE TRENT

Work is Under Way to Expand the Traffic on the Waterway

Sir Brian Robertson, Chairman of the British Transport Commission, has announced that the Commission has approved a £473,000 programme of further improvements on the River Trent, which carries a substantial general cargo traffic from the Humber ports, largely to the Nottingham area. This particular programme is concerned only with the river as such and forms part of the Commission's £5,500,000 Development Plan for its principal waterways. It is in addition to the £150,000 Trent Scheme which was announced in June 1955, for the development of terminal facilities to assist carrying interests. In the last three years carryings on this waterway have averaged nearly 800,000 tons a year, and the Transport Commission hopes that its latest scheme of improvements will foster still greater traffic on the Trent.

The most important part of the £150,000 scheme announced in 1955 concerns the Trent Lane and Meadow Lane riverside depots in Nottingham, where development work is now well under way. Sir Brian Robertson visited the sites earlier this month and made a tour of inspection with Sir Reginald Kerr, General Manager, British Transport Waterways; Mr. T. H. Thornton, Divisional Manager, North-Eastern Waterways Division, and Mr. G. E. Willbond, District Traffic Officer, Nottingham. At Meadow Lane the riverside frontage is being extended to accommodate three additional berths, a new storage shed has been built and three mobile cranes and equipment have been installed. Additional cranage and other facilities have been provided at Trent Lane, where a transit shed, destroyed during the war, has been replaced. The work at these two depots is being carried out at a cost of £90,000. Of the remaining £60,000, an estimated £22,000 has been allocated for the purchase of two 150-ton standard Trent-size powered carrying craft. The rest is being spent on re-equipping and expanding the depot at Wincolmlee Wharf (Hull).

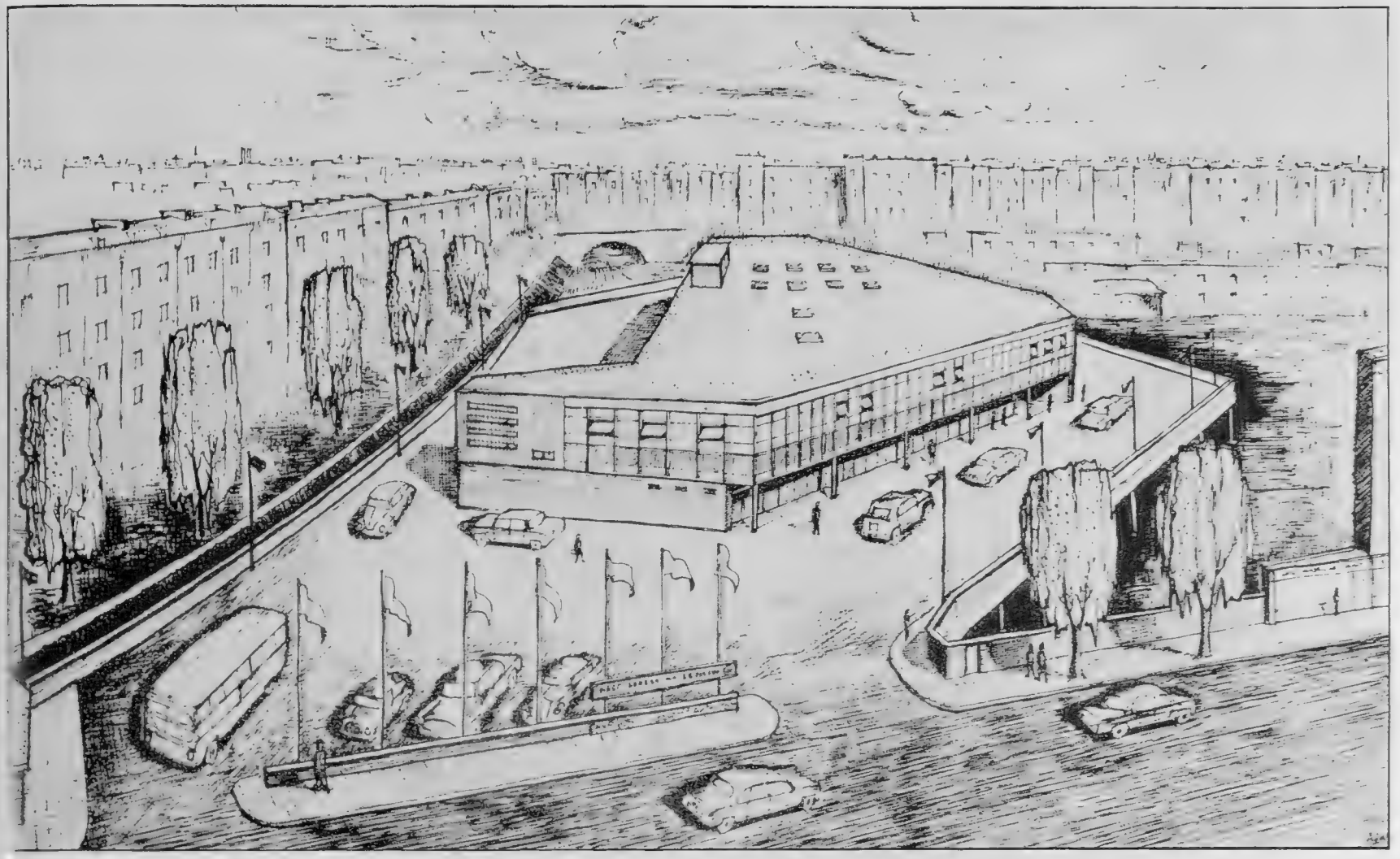
In the new improvement scheme for the waterway itself there are five main proposals. The most important, or at least the most costly at £216,500, is the protection of banks and navigation works. The dredging fleet and other plant are to be strengthened and modernised, and the Cromwell lock, some five miles downstream from Newark, is to be extended to accommodate eight standard craft or three large oil tankers. In order to speed the passage of craft all the main locks along the waterway are to be mechanised, thus enabling the gates and sluices to be operated simultaneously.

THE CHAIRMAN OF THE BRITISH TRANSPORT COMMISSION INSPECTS DEVELOPMENT WORK ON THE RIVER TRENT AT NOTTINGHAM: Sir Brian Robertson (third from right) pauses at the side of a lock during his tour of the Meadow Lane and Trent Lane riverside depots. Nottingham is an important waterhead and distribution centre for much of the Midlands, especially for general cargo discharged direct from ships into barges at the Humber ports, and the development work at the two depots is intended to expand this traffic substantially. A £473,000 programme of improvements to the waterway is also in hand.

ACTIVITY ON THE WHARF: The visitors are watching one of the cranes handling the cargo of a barge moored at Meadow Lane depot.

A TOUR OF INSPECTION: *Above* and *on right*—Sir Brian and the other officials inspect development work at the Meadow Lane depot. Trent Bridge is in the background of the picture on the right.

FOR AIR TRAVELLERS—AND FARMERS

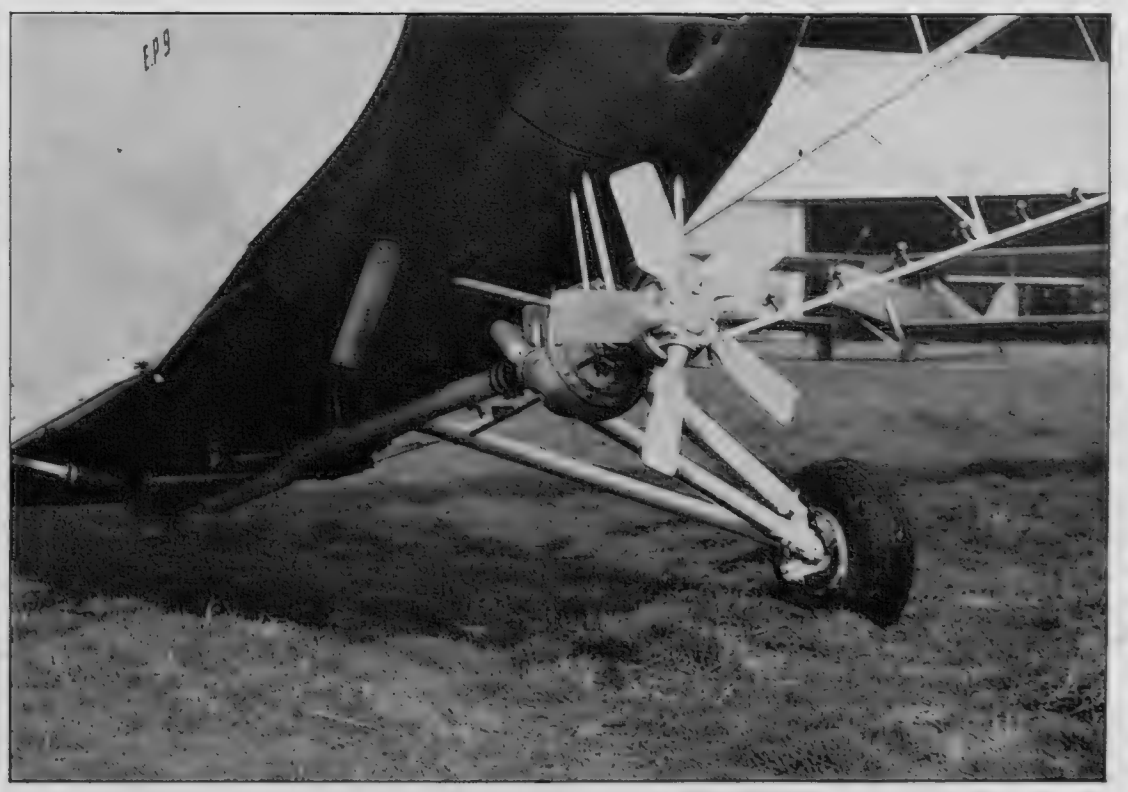


WEST LONDON AIR TERMINAL : An artist's impression of the building which is to be erected on the platform which London Transport are constructing over the railway tracks adjacent to Cromwell Road, at the town end of the new roadway to London Airport. It will be one of the world's largest prefabricated buildings for public use, and is intended to come into operation about September of this year. West London Air Terminal will replace the existing British European Airways Waterloo Air Terminal on the old Festival of Britain site.

LONDON'S NEW AIR TERMINAL

The new West London Air Terminal which is to be built on a steel and concrete platform adjacent to Cromwell Road, over the railway tracks between Gloucester Road, Earls Court and High Street, Kensington, stations, is to be ready for use about the end of September. Air Terminals Limited, the company set up to operate it, say that the new terminal will be one of the world's largest pre-constructed buildings for public use. The platform, which is being erected by London Transport, will be completed next month, and the delta-wing-shaped building is scheduled for erection in four and a half months. The value of the building contract exceeds £250,000.

To design and construct such a large building in so short a space of time is involving careful planning. Richard Costain Limited, the contractors, have modified their system of prefabrication and component sections of the building are being made in various parts of the country. They will be numbered and brought to London, where they will be stored ready for quick erection on the platform when it is completed. The terminal will contain departure and arrival halls on the ground floor, and a 150-ft.-long buffet counter and bar on the upper floor. It will be used by most airlines other than B.O.A.C., who will continue to use Airways Terminal at Victoria.



AERIAL CROP-SPRAYING EQUIPMENT : *On left*—The tank which holds spray fluid is located behind and below the pilot's seat. *On right*—The spray pump which is driven by the slipstream and the feed pipes from the tank in the fuselage to the nozzles underneath the aircraft. These pictures were taken at a recent demonstration of the agricultural uses of the new Edgar Percival E.P.9 aircraft at Stapleford Airfield, near Romford, Essex. The E.P.9 is said to cover more acres per hour than any other type of machine used for crop-spraying. It holds up to 170 imperial gallons of liquid, dischargeable over a width of 90 ft. at 100 m.p.h. The E.P.9 was designed specifically for agricultural work but has a completely unrestricted certificate of airworthiness. Take-off distance in a 5 m.p.h. wind is only 110 yds.; the landing speed is 37 m.p.h. As a feeder-liner it is capable of carrying five passengers, and its "pod" fuselage makes it particularly suitable for supply-dropping, freighting, ambulance work, photography and geophysical survey. The E.P.9 is in full production and in service in New Zealand. Its most recent purchaser is a German firm.

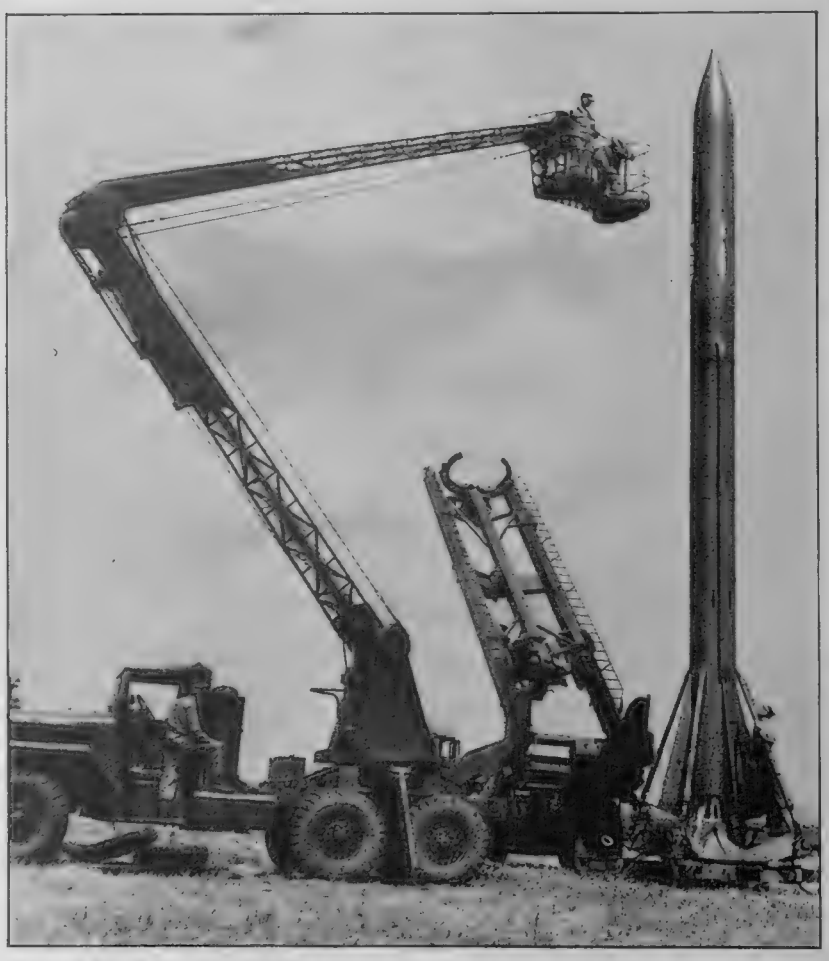
SPRAYING CROPS FROM THE AIR

PROGRESS IN INDUSTRY AND ENGINEERING—*A Survey of Achievement in Britain and Overseas*

PROJECTS IN CONCRETE AND METAL

BRITAIN'S LARGEST PRE-STRESSED CONCRETE BRIDGE

The new Clifton Bridge which is being built over the River Trent at Nottingham will be the largest pre-stressed concrete bridge in Great Britain. It will also be one of the largest bridges to be built in this country since the war. The pictures *above* and *on right* show the two side spans of 125 ft. and the first part of the vast centre section, which will be 275 ft. long. The bridge will have an overall width of 46 ft. 3 ins. and will comprise a 22-ft. carriageway, a 9-ft. cycle track and a 6-ft. footpath. Six pre-stressed concrete approach spans on both banks of the river will carry the road over low-lying land and over an existing road. Clifton Bridge itself is approximately 1½ miles from Trent Bridge, which has been the scene of severe traffic congestion for some years. It will eventually form part of a dual-carriageway trunk road which is planned for the area. When this scheme is put in hand a similar bridge will be built immediately alongside. Clifton Bridge is being constructed for the City of Nottingham, whose engineer is Mr. R. M. Finch, by James Miller and Partners Ltd., and the Consulting Engineers for the main span are R. Travers Morgan and Partners. It is expected to be completed next year.



AT AN AMERICAN GUIDED MISSILE SCHOOL

A "Corporal" guided missile is made ready for a simulated firing or "dry run" at the U.S. Army Ordnance Guided Missile School at Fort Bliss, Texas. A last-minute check is being carried out by two students riding in a "cherry picker," or servicer. This type of mobile lift is in service with all U.S. Army missile units, including those based in Germany. A similar device known as the Simon Hydraulic Platform is manufactured in Britain and was exhibited at the heavy section of the British Industries Fair in 1955. It enables workmen to reach heights of up to 40 ft. without using ladders. The vehicle which transports the missile (centre right) is also equipped with an erector which stands the "Corporal" upright on the steel platform from which it is "fired." No missiles actually leave the ground at Fort Bliss, but army technicians undergo a thorough course by means of mock launches. The "Corporal" is in service as a support weapon for striking targets 20 to 50 miles from the firing point. Various warheads, including nuclear ones, may be fitted to suit the needs of the objective.

A TANKER HAS A NEW MID-SHIP SECTION

The after-part of the 16,000-ton tanker *Esso Glasgow* is seen in the Belfast Graving Dock shortly before the fitting of a new mid-ship section. The tanker had been separated amidships and the two sections sealed for towing to the graving dock. The new centre section, which has been built by Harland and Wolff Limited, is 313 ft. long and weighs 3,400 tons. Its purpose is to give the tanker greater flexibility in cargo-carrying capacity so that she can take up to six different grades without contamination. In order to give greater safety the section has a special closed loading device, whereby fumes are vented up the hollow mast. Also included in the new section are two pump rooms, each with two steam reciprocating pumps. The change in design has become necessary, as the tanker has been switched from deep-sea work, during which she carried fuel in bulk, to the British coastal trade, where she will serve the various Esso terminals. *Esso Glasgow*, a standard "T2"-type single-screw tanker, which was formerly known as *Wauhatchie*, was built in 1944 by the Sun Shipbuilding and Dry Dock Company of Chester, Pennsylvania, U.S.A. She was originally 523½ ft. long.

HONG KONG'S BIGGEST RESERVOIR

Above is a front view of a section of the Tsun Wan Water Purification Works which forms part of the newly inaugurated Tai Lam Chung scheme for the Hong Kong Waterworks. It is in an elevated position so that, after treatment, the water can flow by gravity to the distribution or service reservoirs which then feed direct to the consumers. The new water scheme, inaugurated by Lady Patricia Lennox-Boyd, wife of Britain's Colonial Secretary, incorporates Hong Kong's largest reservoir and will augment the colony's daily supply of water by some 27,000,000 gallons, giving a maximum, at times, of 40,000,000 gallons per day. The possibility of obtaining water from the Tai Lam Chung Valley was first considered in 1939, when the Hong Kong Government, faced with an insufficient supply, requested Messrs. Binnie, Deacon and Gourley, to act as consulting engineers for the scheme. The war prevented any work from being carried out and operations were not started until 1951. In order to impound 4,320,000,000 gallons of water at a height of 200 ft. above sea-level, a mass concrete gravity dam, 180 ft. high and 1,200 ft. long, has been built across the mouth of the Tai Lam Chung Valley. About 4,000 acres of land drain directly to the reservoir, and an additional 4,000 acres will be made to drain to the reservoir by the building of catchwaters. From the reservoir the water is conveyed through tunnels and pipelines to the Tsun Wan pumping station six miles away. It is then pumped to the filtration plant before passing to the distribution or service reservoirs. All the main items of plant and equipment were supplied by United Kingdom manufacturers. The cost of the scheme, up to and including the Lai Chi Kok service reservoir, is about £4,000,000, but the total cost will be in the region of £8,400,000.

A SECTION OF THE PARTLY-FINISHED MAIN DAM OF HONG KONG'S BIGGEST RESERVOIR: It is seen from the reservoir side. As well as the large dam across the main stream of Tai Lam Chung, there are three subsidiary dams to block openings in the surrounding hillsides. These together will form a reservoir with a capacity of 4,320,000,000 gallons. Much work is required before the scheme is completed.

MORE POWER FOR SCOTLAND

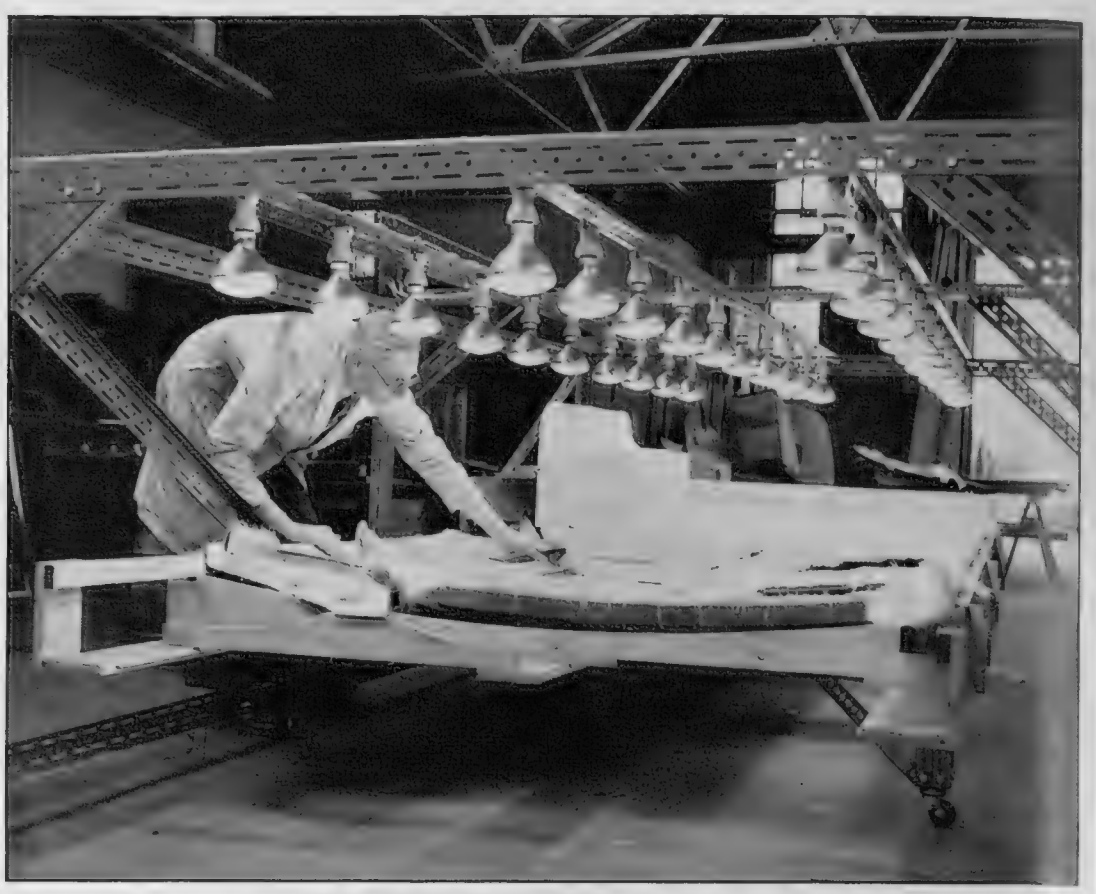
On left is an artist's impression of the 110-ft.-high dam which is to be built across the River Farrar, about one mile downstream of Loch Monar, as part of the new Strathfarrar and Kilmorack scheme of the North of Scotland Hydro-Electric Board. The catchment area which it is proposed to utilise extends to 350 square yards in the counties of Inverness and Ross and Cromarty, and the intention is to harness the waters of the Rivers Farrar and Beauly for the production of 268,000,000 units of electricity annually. Of the four power stations which the Board propose to erect, two will be in Glen Strathfarrar and two in the Kilmorack Gorge. The catchment area of Loch Monar will be augmented by diverting back into the reservoir water from the Uisge Misgeach and other tributaries which join the River Farrar below the dam site. There will also be a subsidiary dam 50 ft. high in a low saddle to the west of the main dam. From Loch Monar the water will be led by a tunnel 5¾ miles in length to a power station near Deanie at the west end of Loch Beannachran. To supply the lower power station the loch will be raised in level by about 8 ft. The two power stations in the Kilmorack Gorge will involve the construction of two dams each about 50 ft. high. The upper dam will be about three-quarters of a mile north of Crask of Aigas, and the water from its power station will discharge direct into the head-pond formed by the lower dam down the river at Kilmorack. It is expected that the construction of the works will take about five years and that the peak labour force will be between 750 and 1,000 workers. The estimated cost of the scheme at present is £14,250,000. In the interests of fisheries, Borland-type fish passes will be installed in the two dams at Kilmorack and also at Beannachran.

PROGRESS IN INDUSTRY AND ENGINEERING—*A Survey of Achievement in Britain and Overseas*

NEW METHODS IN BUILDING AND PLASTICS

BUILDING A "PLASTIC" AMBULANCE : A rear wing arch made of reinforced plastic for use in the bodywork of an ambulance is trimmed with an electric saw at the Wandsworth Supplies Depot of the London County Council. The L.C.C. is building complete plastic bodies which are later fitted on to a standard Austin LD series chassis. The first of these new "plastic" ambulances is already in service.

THE ROOF OF A "PLASTIC" AMBULANCE: Workmen at the Wandsworth Supplies Depot remove a roof for an ambulance from its mould. The translucent material sheds a soft, natural light on the interior of the ambulance in daytime.



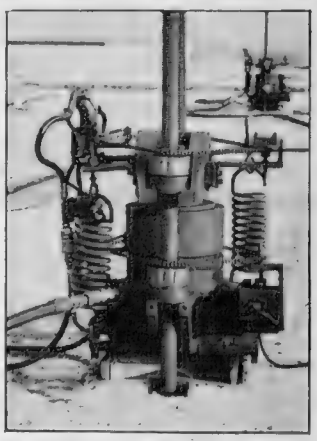
DRYING ONE OF THE SIDE-PIECES : The plastic side wall of an ambulance is dried and cured in a special frame. The rough edges, to be seen in the foreground, will be trimmed before the side is passed into the Construction Department.

THE USE OF PLASTICS IN VEHICLE CONSTRUCTION

The main plastic material used in the construction of the bodywork of the new L.C.C. ambulances is polyesteresin, with a glass-fibre reinforcement. Pigmented white, the material does not need to be painted and is much more resistant to accidental damage than any standard metal. Construction is much simplified by the fact that no conventional frame is necessary for the bodywork. A light skeleton frame is incorporated with the plastic material as it is put into the moulds. The process itself is both simple and economical. The moulds now in use at the L.C.C. Supplies Department in Wandsworth were built of plastics from full-scale drawings of the required body shape. Prior to this the lines of the body had been decided on by experiments with a small plasticine model. Now that the moulds are in use it is possible to make any number of the three main components—the roof, left side and right side.

RAISING A CONCRETE ROOF IN AMERICA

A NOVEL CONSTRUCTION METHOD IN NEW JERSEY : This massive concrete roof on a factory belonging to the Standard Tool and Manufacturing Company, of Lyndhurst, New Jersey, was actually raised in three giant sections by a network of hydraulic jacks. The jacks were fitted on the top of each of the twenty-four columns designed to support the roof. From each hydraulic jack two long threaded rods reached down into the three concrete sections of the roof. When oil pressure was applied, the sections were gently pulled up in turn much in the manner in which a car is lifted by jacks from below for a tyre to be replaced. The first section to be tackled was a 900-ton outer slab which was pulled 26 ft. straight up from the ground. This was followed by the biggest section in the centre weighing approximately 1,400 tons. Finally, another 900-ton outer slab was hauled up to complete the roof. The gaps between the sections were then filled in with concrete. Once the roof sections had reached the top of the columns a simple operation enabled the jacks to be removed and the columns then took on their task of supporting the whole mammoth structure. According to Messrs. Powers and Kessler, the New York architects who designed the building, the operation is comparable to lifting a small ocean-going vessel out of the water. The architects claim that similar factories, warehouses or store-sheds will become more and more popular in the United States because they provide fireproof buildings at about the same cost as non-fireproof structures.



ONE OF THE HYDRAULIC JACKS : These machines on top of each of the supporting columns lifted up the three roof sections.

BEFORE LIFTING ONE OF THE ROOF SECTIONS : A construction worker climbs up one of the supporting columns to adjust the hydraulic jack on the top before the actual operation of lifting the roof begins. The roof slabs were lifted in three separate stages.

MANCHESTER AIR CRASH : An aerial view of the scene near Ringway Airport, Manchester, after a Viscount 701 turbo-prop airliner from Amsterdam had ripped through a terrace of houses as it came in to land. All fifteen passengers and the crew of five were killed. Two houses were demolished, and in one of them a mother and her two-year-old son lost their lives. The aircraft was making its approach on a radar course, when over the Ringway approach lights it veered, struck the ground, and careered on for about 50 yards across Shadow Moss Road before hitting the houses. There was an explosion and the airliner and the houses blazed furiously.

THE VISCOUNT CRASH

Twenty-two Died in the Disaster Near Manchester

On left—

FOAM-COVERED WRECKAGE: Rescue teams were on the scene of the disaster within a few minutes and as firemen played hoses on the twisted metal and rubble, ropes were attached to the larger pieces of wreckage to pull them apart. Bodies were still being recovered several hours after the crash. This was the first Viscount crash in airline service since the aircraft was introduced on B.E.A.'s routes in April 1953. Nearly 2,000,000 passengers had been safely carried in them by the Corporation. B.E.A. announced that twenty-five Viscount 701's were being withdrawn as a precautionary measure, but by Monday eight had been returned to service. Vickers-Armstrongs, the Viscount's makers, stated that they were communicating with other operators of the Viscount series 700 with details of the precautionary measures deemed necessary. More than 180 Viscounts are now operating in many parts of the world. The trouble is believed to have been caused by a small bolt in the flap-operating mechanism.

THE MOST MODERN CONGREGATIONAL CHURCH IN THE BRITISH ISLES: It has seven sides and is at Bromley, in Kent. On the right of the flat roof is the organ chamber, which is situated behind the pulpit. The church, the third on the same site, was dedicated last Saturday.

The new Congregational Church at Bromley, in Kent, replacing the old building which was destroyed by bombs in April 1941, is quite startling in design. It has seven sides, a flat roof and plain windows set in rustless aluminium fittings. The organ chamber, which is seen on the right in the above picture, is concealed behind the pulpit and Communion Table. The design of the new church is based on the old Meeting Houses, an excellent example of which is to be found at Norwich. Inside the church the design is in keeping with the striking exterior. There is a blue ceiling with lights set in the form of stars, and the seating accommodation, which is contemporary in design, is finished with foam rubber. All the wood furnishings are in mahogany, which is a departure from the conventional oak. Alongside the church are the usual halls which are not due to be completed until later this year.

The old church on the same site was built in 1882. It had, in turn, replaced an earlier building of 1835 which was known as the Bromley Chapel. Before that, a building, called the Bethel Chapel, had stood near the market-place since 1788. The cost of the new church and its associated buildings is £70,000, of which nearly £10,000 has been raised by the members of the congregation. There is seating accommodation for 400 people.

MODERN DESIGNING

New Churches in England and Australia; Hampshire's Mammoth Power Station

On right—

ONE OF A SERIES OF NEW CHURCHES IN SYDNEY, AUSTRALIA: A view looking towards the west front of the new Roman Catholic Church of St. Bernard, at Botany, Sydney, which has been built in the parabolic shape. It is contemporary in style and is mainly of prefabricated concrete. The exterior is finished with white marble chips embedded in concrete, with textured and patterned brick on the west wall. There is seating accommodation for 400 people. The church is one of several, of various denominations, which have recently been completed as part of the development schemes now in progress in Sydney and its suburbs. Other new churches are at Chatswood, Killara and Flemington.

MARCHWOOD'S MAMMOTH POWER STATION IN HAMPSHIRE: The camera looks across the oil fuel pipes and the wharfs which are used by tankers and coal-carrying ships towards the general buildings of the partly completed power station. The first half of Marchwood power station, which is costing £30,000,000, is to be officially opened by Princess Margaret in June.

Although the first half of the massive power station at Marchwood will not be officially opened by Princess Margaret until June, electricity has, in fact, been generated from there since December 1955. At that time one turbo-generator was put into service to give an output of 60,000 kilowatts. Since then three more turbo-generators have been brought into service and the station now has an installed capacity of 240,000 kilowatts. By 1959 the power station at Marchwood will be fully operational, with eight turbo-generators supplying a total of 480,000 kilowatts (or the equivalent of 670,000 h.p.) to the national grid. In the construction of the buildings at the station extensive use has been made of aluminium sheeting.

Marchwood Power Station is situated on Southampton Water some seven miles from the Fawley Refinery of the Esso Petroleum Company. Oil fuel is used at the station, and this is carried from the refinery by tankers which discharge their cargoes at a specially erected wharf close to the power-house. Apart from the Bankside Power Station on the River Thames, in London, Marchwood is the only other oil-fired power station in the country. There are, however, plans for building or converting seventeen other power stations in this country to use oil fuel. Eventually, these will consume oil fuel to the equivalent of 9,000,000 tons of coal a year.

On left—

A LANDMARK IN HAMPSHIRE: One of the two 425-ft.-high chimneys at the power station is seen from its base. The two chimneys are now well-known landmarks along Southampton Water.

On right—

THE POWER-HOUSE AT MARCHWOOD: It is massive in proportion and modern in design. The power station is not expected to be fully operational until 1959.

NEW BRITISH CARS AT GENEVA

The Swiss Show has given Four British Manufacturers their First Chance to Display New Models Internationally, Among them the 3·4 Jaguar and the Meadows Frisky

By "THE SPHERE" MOTORING CORRESPONDENT

BRITAIN is well represented at the Geneva Motor Show. Our car chiefs fully realise the importance of the Swiss Salon. Switzerland—which makes no cars of her own—is itself a considerable export market in which the cars of many different countries compete on more or less level terms. There are no import restrictions. Apart from this, the Geneva Show is a shop window studied by potential buyers in many different European countries.

In displaying their wares in this showcase, British car chiefs are after extra business all over the Continent as well as a bigger share of the Swiss market itself. British cars have not done so well in Switzerland over the past few years as in the period immediately after the war. That was before the Volkswagen factory really got going. The German car is now the most popular single model in Switzerland—but is closely followed by the Opel, made by General Motors. This is an interesting fact. It proves that the V.W. doesn't sell simply because it has an air-cooled engine at the back, for the Opel is a perfectly conventional car, with a water-cooled engine at the front.

The Swiss Show has given four British manufacturers their first chance to display new models internationally. I refer to the 3·4 Jaguar, the Austin A.55 Cambridge, the Vauxhall Victor and the Meadows Frisky. I described the A.55 and the Victor in my last notes. The new Jag. and the Frisky have been announced since.

A NEW JAGUAR MAKES ITS DEBUT: Initially produced for export, the new 3·4-litre Jaguar is claimed as the world's fastest five-seater saloon. It is expected to sell in large numbers in the United States. The car is on exhibition at Geneva, where it has been greatly admired.

The new Jaguar is a remarkable car. It has been greatly admired at Geneva. Basically, it is the 2·4 saloon with the 3½-litre engine used by Sir William Lyons in his other models. So the 3·4 saloon is a car with quite a bonnet full. Jaguars claim it is the world's fastest five-seater saloon. I am not disposed to dispute the boast, for I know of no other five-seater saloon that does 120 miles an hour or more. There are three ways of identifying the new Jag. apart from the speed with which it overtakes you. It has a wider radiator grille than the 2·4, the rear wheel spats have been cut away and there are twin exhaust pipes.

I have driven the new Jaguar. It is an invigorating experience. I am certain it will sell in large numbers in the U.S.A. where cars are largely judged on engine size, anyway. Jaguars claim it will cover a quarter of a mile from a standing start in 17·9 seconds.

In Britain, when it is available, the 3·4 saloon will cost £1,672 7s., tax included. That is £241 10s. more than the 2·4-litre model and £157 10s. less than the new Mark VIII saloon. For £67 10s. extra you can get a Borg-Warner overdrive. For an automatic gear-box by the same firm you add £192 to your cheque. Jaguars had sent 200 of the new cars to the U.S. before the fire. More than a hundred others were destroyed. The factory has made a wonderful recovery and before long will be back to full production.

The Meadows Frisky is one British firm's answer to Continental domination of the miniature car field. The Frisky will compete in the class in which Germany's Goggomobil and Isetta are making such headway in Britain. It will be built by Henry Meadows, Ltd., of Wolverhampton, a subsidiary of Associated British Engineering. They hope to be turning out 200 a week by Motor Show time.

The Frisky is a good-looking little car. It should be. It has been styled by a well-known Italian car designer, Giovanni Michelotti, in conjunction with the internationally famous firm of Vignale of Turin, who built the prototype bodies on view at Geneva. At the time of writing, the price had not been definitely fixed; but it will be less than £400, including tax. The Frisky is powered by a Villiers twin-cylinder, two-stroke engine of 250 cc. and has a four-speed gear-box which can be switched into reverse by making the engine revolve in the opposite direction to normal. To produce this effect you simply turn a switch.

The makers claim a cruising speed of 50 miles an hour and the Frisky should do 65 m.p.g. however hard you drive her. It has "gull wing" doors, hinged close to the centre line of the roof. The main seat is wide enough to take two adults and a child. In the back there is room for two children or a lot of luggage. There is more luggage space in the nose of the car, beyond the feet of the front seat passengers. There is independent springing of all four wheels; final drive is by enclosed chain, and the chassis is of welded tubular steel.

The Frisky should be an easy car to keep in order, as there are only four grease nipples. First models for the British market are scheduled for midsummer.

"A GOOD-LOOKING LITTLE CAR": An artist's impression of the Meadows Frisky, which is one British firm's answer to Continental domination of the miniature car field. The first models for the British market are expected in midsummer.

It would not be true to say Mr. Harold Watkinson, Minister of Transport, dropped a brick when he went to Birmingham the other day. He did quite the reverse. He threw a lot of bricks—upwards. One of them hit a Press photographer. Others fell on or near civic dignitaries who had assembled to hear the Minister inaugurate Birmingham's £15,000,000 inner ring road. He pressed a plunger to demolish the last wall of a house which has had to be pulled down to make way for the road.

The charge of gelignite appears to have been more than adequate for the job. I should like to think there was something symbolic in the forthright way in which Mr. Watkinson removed that obstacle! We hear so much about new roads being on the way. We see so few miles of new road. But the Minister, in his Birmingham speech, said we may expect results soon; results of all the work that has been going on since the present road programme was first announced three Transport Ministers ago.

It takes about three years to get a major new road started, but apart from the big projects, like the London-Yorkshire motor road, a lot of smaller schemes have been under way for some time. Since April 1955, work has begun on 2,000 road schemes in England and Wales. Their total cost will be well over £30,000,000. Mr. Watkinson hopes to get the St. Albans-Dunchurch motor road started this year. That is the first stage of the London-Doncaster motor road. The St. Albans by-pass, which will be a continuation of the motor road, should also be started in 1957. Meanwhile the Minister seems to be concentrating on improvements to the Great North Road.

Mr. P. A. Phillips, the Rover Co.'s project engineer, gave a fascinating lecture the other day on turbocar development. It was a realistic talk, in which he faced up squarely to the problems of harnessing the gas turbine to a car. He dealt at some length with the question of fuel consumption and showed that the development of heat exchangers of different kinds is bringing down the turbine's heavy thirst into line with that of a piston engine.

Another problem, not so widely appreciated, is the acceleration time lag between opening the throttle and the engine's response. Mr. Phillips said it may be possible to solve this problem by providing some form of electrical assistance from the starter motor or by using the forward momentum of the car when braking to spin a flywheel geared to the compressor. This would maintain the compressor at a reasonably high speed when the throttle was closed. All very technical, but it goes to show that turbine-engined family cars are not just round the corner. It also shows that the gas turbine will not be as simple a unit, when fully developed for the automobile, as some people would have us believe.

The petrol crisis came too late to prevent 1956 being a boom year for motoring. This much is clear from the annual report of the Automobile Association, whose membership has risen by over 160,000 to a record total of 1,865,000. The A.A.'s 24-hour emergency service dealt with 713,000 inquiries during the year. If you work it out, that is equal to one call every 44 seconds throughout the year.

The organisation's free breakdown service was used by more than 281,000 members. In other words, there was roughly one breakdown every other minute of the day and night attended to by the A.A. They did this with the co-operation of 5,000 garages, backed by their own radio-controlled fleet of service vehicles.

The A.A. helped 100,000 members to take their cars to the Continent on holiday—most of them in the space of four months—and another service to the motoring community was the recovery of nearly £180,000, or nearly £500 every day, for members who suffered losses not covered by their insurance policies. More than 11,000 vehicles were inspected by A.A. engineers during the year, the radio coverage was extended to a total of 36,000 square miles, and on every working day an average of 100 members were defended by A.A. solicitors in the courts under the free legal aid scheme.

And now we have news that the A.A. is this year opening five new area headquarters. Three of the new offices—at Exeter, Glasgow and Nottingham—will replace premises that have become inadequate for the Association's growing membership. The Paris office is being moved to a new building near the Etoile (at the top of the Champs Elysées); and at Stanmore, Middlesex, a completely new three-storey building is being opened in the spring. It will serve members living in Middlesex and Hertfordshire and in north and north-west London.

To be quite candid, it came as a bit of a shock to learn that Stratstone, the London Daimler distributors who have been supplying cars to the Royal Family for about half a century, are now selling Volkswagens as well as Daimlers. It is a sign of the times, I suppose. Petrol rationing has given no stimulus to the sale of cars in the Daimler price bracket. And with a European Common Market in the offing not even the most chauvinistic among us will be able much longer to criticise people who buy foreign cars.

Another big London firm of car distributors who are doing the same thing as Stratstone are Pass and Joyce. They are distributing the Isetta "bubble car," which is about to go into production at Brighton. The main components will come over from Germany, but 60 per cent. of the value of these Brighton-assembled Isettas will be represented by British labour. An improved version of the four-wheel Isetta, just announced, has a smaller rear window, to help correct the impression that you are travelling in a mobile greenhouse. It will be in glass instead of Perspex. They have greatly improved the front suspension and there are sliding windows both sides. The price remains unchanged at £398, tax included.

CONDITIONS OF SALE AND SUPPLY.—This periodical is sold subject to the following conditions, namely, that it shall not, without the written consent of the publisher first given, be lent, resold, hired out or otherwise disposed of by way of Trade except at the full retail price of 2s., and that it shall not be lent, resold, hired out or otherwise disposed of in a mutilated condition or in any unauthorised cover by way of Trade, or affixed to or as part of any publication or advertising, literary or pictorial matter whatsoever.

THE SITE OF A TWO-LEVEL ROAD JUNCTION IN CHISWICK: This traffic roundabout in Chiswick, where the Cromwell Road Extension joins the Great West Road, is to be the site of a new two-level road junction. Work is expected to start on the scheme, which will cost about £820,000, in a matter of a few weeks. The two-level road junction will incorporate a fly-over section of roadway about half a mile in length and a lower level roundabout 400 ft. in diameter. All the traffic using the Cromwell Road Extension will pass over the lower intersection by means of the fly-over. The scheme will also deal with traffic to and from the North Circular and the Chiswick High Road. It will take about 2½ years to complete.

MOTORING NEWS

Events in England and Scotland and a Traditional Ceremony in Rome

A BLESSING OF MOTOR VEHICLES IN ROME: Cars, buses, motor-cycles and lorries are assembled in the Coliseum Square in Rome on the occasion of the traditional blessing of motor vehicles. Among the vehicles drawn up for the ceremony can be seen buses of the public transport system, fire engines of the city's fire brigade, police motor-cycles, lorries and wagons of private companies, and the cars of individual motorists. *On right*—The blessing is given as Holy Water is sprinkled on the assembled motor vehicles.

A POSSIBLE TURBINE CAR OF THE FUTURE: Sir Leonard Lord (right), Chairman of the British Motor Corporation, and Mr. G. W. Harriman (left), Deputy Chairman, discuss cars of the future in the Styling Department of the Austin Motor Company at Longbridge. Also in the picture are, from left to right, behind model, Mr. R. Burzi, Chief Body Stylist; Mr. J. Buckley, and Mr. George Lloyd, who are respectively Works Director and Managing Director of the Austin Motor Company in Australia. The scale model represents a possible development in the gas turbine field. Big advances have been made in achieving satisfactory fuel economy with this type of unit.

MASS X-RAYS IN SCOTLAND: An A.A. patrol leads a radiography unit from Stockport to a dispersal area in Glasgow. On right a unit from Liverpool awaits its turn to move. The mobile X-ray vans had come from all over the country, and from as far afield as Brighton, to take part in a Mass Radiography Campaign which is being held in Glasgow. The convoy of vehicles formed one of the largest bodies of its kind to be piloted by the Automobile Association with the aid of radio. In all, some sixty A.A. patrols working in relays took the convoy a distance of 400 miles to its destination in Glasgow. With the patrols were a number of A.A. Road Service Land Rovers.

The World of Books: By VERNON FANE

IMMORTAL WOMEN

Mr. Ivor Brown's Study of Four Famous Beauties; Memoirs and Reflections from Britain, America and Australia; Life in Togoland; Mr. Charles Morgan's New Novel

THERE are four of Mr. Ivor Brown's DARK LADIES (Collins. 18s.). They are Helen of Troy, Sappho, Cleopatra and Shakespeare's Dark Lady. In a sense the book consists of four linked and concentrated biographies. The publisher insists that they are not written for specialists in ancient history and classical or Elizabethan literature. But for those of us known as the General Reader, it is worth remembering that Mr. Ivor Brown is a scholar and a gentleman.

In the Shakespearian context he is, of course, eminent and could be unchallenged. Who else could write so elegantly and sympathetically about that persistent enigma, the Dark Lady of the Sonnets? Or, for that matter, develop that legend from a study of the woman who has inspired the greatest poetry of the ages as well as launching all those ships? Then there is Sappho and, while some may be found to dispute Mr. Brown's contention of her essential normality, few would dare to question his opinion of her great poetic gifts. Moreover, pursuing his gallant line, he is prepared to assert that Shakespeare, Plutarch, Shaw and the rest of them have traduced Cleopatra: that she was no wanton but faithful to Cæsar and to Antony in her own fashion.

This is civilised and highly readable fare. There is only one Ivor Brown and he is inimitable.

Sir Charles Tennyson, whose biography of his famous grandfather is a standard work, has set down his own reminiscences in STARS AND MARKETS (Chatto and Windus. 21s.). It begins with a charming vignette of his grandparents and of life at Farringford and Aldworth (which includes a remarkable portrait of an essay-writing coachman called William Knight), and goes on with a sketch of that lovable statesman and man of letters, Augustine Birrell, who became his step-father.

Distinguished in public life, Sir Charles takes the reader behind the scenes of the Civil Service and of the establishment of the Federation of British Industries, out of which stemmed, largely through his activities, the Council of Industrial Design.

AN AMERICAN PLAYWRIGHT RELAXES: Mr. Tennessee Williams plays a small organ in his studio at Key West, in Florida. This is one of the ways in which the dramatist enjoys relaxation from writing. His most recently produced play is *Cat on a Hot Tin Roof*. Among his past successes was *A Streetcar Named Desire*.

Mr. Edmund Wilson, author and critic, better known in the second capacity, perhaps, has written a volume of *Reflections at Sixty* which he has called A PIECE OF MY MIND (W. H. Allen. 15s.). In this book, which is chiefly autobiographical in the sense of intellectual explorations, Mr. Wilson discourses on religion, Russia, the Jews, his own country the United States, sex, science and himself. As always he is a provocative writer, moving one to irritation as well as to pleasure and as arbitrary as he is original. In the last and most intimate essay he writes of his parents and the circumstances of his upbringing and contrasts his generation with theirs.

FOLLOW MY DUST! (Heinemann. 21s.) is a biography of a writer whose life, work, experience and philosophy are about as strongly contrasted as could be with the author of the last book. Mr. Arthur Upfield is an Englishman by birth, who has long since settled—though there could scarcely be a less appropriate word—in Australia. He writes what are conventionally known as detective stories since they *are* concerned with detection and include possibly the best fictional detective now practising, the semi-aboriginal Napoleon Bonaparte. But these books are also brilliant studies of the Australian outback and its lesser-known coasts. Mr. Upfield, in other words, does a splendid job for Australia, the country in which he has been boundary-rider, cattle-drover, opal-gouger (a new one on me), vermin-fence patroller, manager of a camel station and wanderer *par excellence*. His life story is as unconventional and rumbunctious as anything he has invented for his characters and Miss Jessica Hawke has written of it with his help, to show him as both intransigent and gay; a man who takes his work seriously and himself never, and who invariably refers to himself as "the famous ruddy author." I wish I knew him.

If you read these lines, written by a world-known foreigner, who would you suppose was the author? ". . . an English ship reeks of England, and there is no other country in the world, besides my own, whose way of life I like so much. I love English traditions, English politeness, English architecture, I even love English cooking! I dote on Yorkshire pudding, mince pies, stuffed chicken, and, above all, I worship the English breakfast of tea, porridge, eggs and bacon." That is an expression of some of the tastes of M. Christian Dior, who is, to say the least of it, a notable dressmaker. His autobiography, DIOR (Weidenfeld and Nicolson. 21s.), is interesting as a fabulous success story which also tells us something about the pleasant personality of M. Dior.

WORKING FOR THE WINDSORS (Wingate. 15s.) is Miss Dina Wells Hood's account of a time in which she was one of the secretaries in the household of the Duke and Duchess of Windsor, from the summer of 1938 till September 1939. During this period much time was spent at a big house on the Cap d'Antibes, the Château La Croe, and it is of this setting that Miss Wells Hood has written this accurate, dignified yet somehow sad book.

The two next books are of travel considerably further afield than the golden Mediterranean coast. First, Mrs. Jane Bernard's volume of experiences as the wife of a Colonial administrator in Togoland. This is a domestic rather than an ethnological survey and the author writes amusingly and with spirit. BLACK MISTRESS (Hodder and Stoughton. 16s.) is lively reading and, with its stories of the Gold Coast, topical, too.

THE WORLD IS ALL ISLANDS (Allen and Unwin. 21s.) is a travel book in the most all-embracing sense, for it is Mr. Carl Nielsen's story of a journey round the world in a fifty-year-old schooner with an amateur crew of three or, at one stretch, four. The start was from Mr. Nielsen's native Denmark and the fact that the round voyage of those tens of thousands of miles was made at all was due not only to his determination but to the seamanship of the crew, with him as skipper.

I KILLED TO LIVE (Cassell. 16s.) is just about as tough as it sounds: the story of one Eric Pleasants, professional strong man, as told by Mr. Eddie Chapman, who knew Pleasants in the Channel Isles at the time of the German invasion and met him again ten years later. Pleasants is a strong man in the exact meaning of the term and once his favourite act was to lie with a piano on top of his chest, with two girls dancing on it while another played it. The present book proves that he is not only strong but about as tough as they come, having survived German prison camps and a Russian labour camp.

It is the greatest pleasure to turn to a consideration of two outstanding novels. The first of these is Miss Pamela Frankau's THE BRIDGE (Heinemann. 16s.), the story of a writer who, sensitive, worldly and essentially humane, stays in a limbo between his death on earth and his life in heaven until he has re-lived the most significant moments of his life, the moments in which his decisions or his actions made the next phase of his life inevitable. From the little boy who is afraid of a rough sea to the middle-aged, half-drunken man who falls to his death in New York, the path is retraced from crisis to climax. Miss Frankau's novels have always had both feeling and technical brilliance. It is as if, in this most recent of her books, there were a kind of flowering of talent, emotion and sheer virtuosity.

CHALLENGE TO VENUS (Macmillan. 15s.) is, after a six-year pause, a novel from Mr. Charles Morgan, written with his refreshing grace and sobriety and, for the most part, closely engaging the reader's sympathies. The scene is an old Italian city to which comes an Englishman who has been something of a war hero and, all his life, a familiar friend of Italy. He meets a young widow of extraordinary beauty. Her life is one that suits her taste for independence and solitude; he is on his way to a job in Aden. Nevertheless, from their two different worlds, they see each other in the light of a brief, passionate and, since this is Mr. Morgan's novel, fairly frustrated love affair.

FORLORN CONSCRIPTS

Horrors of a Nazi Penal Regiment

The mercenary soldier may not be a man to envy, but how much worse is the plight of those who are forced without even the lure of gain to fight for a cause that is not their own. THE LEGION OF THE DAMNED (Allen and Unwin. 15s.) is a story written by one of Hitler's unwilling soldiers, Sven Hassel, a man of mixed Danish and Austrian descent, who was transferred from the horrors of a concentration camp into a German penal regiment and thrust into battle on the Russian front. There he suffered the most appalling experiences. Through all these tribulations one thing at least emerges bravely, the devotion, one to another, of these hardly-pressed men.

The Legion of the Damned is in some ways strangely reminiscent of that very different and wholly delightful wartime best-seller, *The Good Soldier Schweik*, especially in the chapter in which the art of dodging front-line duty is exhaustively and expertly examined. But although it has these light-hearted moments, most of the book is only too savagely realistic, as, for example, in its account of the blood-lusting Nazi chaplain who was driven out across No Man's Land and into Russian hands by his maddened subordinates, who could endure no more of him. However, above all else, there runs through Sven Hassel's tragic tale at least one gleam of gold, the fact of man's humanity to man when faced with vast unrelenting and inhuman forces.

Salvatore Ferragamo was the eleventh child of a family of fourteen born in the village of Bonito, near Naples. His family were desperately poor, but not so poor that any one of them need sink to being a shoemaker. At any rate, that was the family view. Salvatore thought otherwise, and to-day, after many ups and downs of fortune, he is the world's most famed shoemaker, having created no fewer than 20,000 exclusive models and taken out 350 patents to protect them. SHOEMAKER OF DREAMS (Harrap. 16s.) is his autobiography, and in it he tells how he has captured the élite trade of the world with salons in Rome, Florence, Venice, and other cities. Among his customers are people known in every corner of the world.

The secret of his success is fascinating. Ferragamo has based his styling on the simple belief that customers should be comfortable, that elegance is not the only arbiter. His art has been to cure ruined feet by providing good shoes. The author has a fascinating chapter on famous fittings, from the diminutive feet of Anita Loos, who takes 2B, to the more massive shoes required by Lauren Bacall and the Duchess of Aosta (9 AAA). In his day Salvatore has clothed some very controversial feet indeed, not forgetting that notable couple Mussolini's Clara Petacci (who had fifty exclusive models) and Hitler's Eva Braun.

Robert Dovers is professionally a cartographer with a flair for polar travel, being a master of sledge journeying either by tractor or dog team. One soon learns that dogs, not tractors, are his favourites, and in HUSKIES (Bell. 21s.) he tells of his adventures on Adélie Land, in Antarctica, with a French scientific expedition. He describes his life with the three teams of huskies which were in his care. This is a charming book, with brilliant descriptions of Antarctic life, and an account of an epic trek across the sea ice in appalling conditions of darkness and blizzard in mid-winter.

René Riesen's JUNGLE MISSION (Hutchinson. 21s.) is the remarkable account of a French explorer's sojourn among the Mois of Indo-China. These people, who are still living in the spear and cross-bow age, give indication, through their myths and legends, of having sprung from Polynesian or even South American stock. It may well be that there in Indo-China is yet another link in the chain of evidence built up by the *Kon-Tiki* adventurers. M. Riesen established a great reputation among the jungle tribes, and writes interestingly and well.

Latest addition to *The Queen's Scotland* series is THE BORDER COUNTIES, edited by Theo Lang (Hodder and Stoughton. 18s.). This deals with Tweeddale, Merse and Teviotdale. Mountain, loch, city and village, castle, church, monument and cottage all have their place in words and pictures in this delightful volume, which is fully up to the standard set by this series.

And now for the personal revelations of an author who calls herself "a secret music addict." RALPH VAUGHAN WILLIAMS: A DISCOVERY OF HIS MUSIC (Macmillan. 18s.), is by Simona Pakenham. This is a glowing tribute to Vaughan Williams, but it is not mere eulogy; for she has something compelling and instructive to say about all the notable compositions of the master. Simona Pakenham's book will undoubtedly help others to share her own delight.

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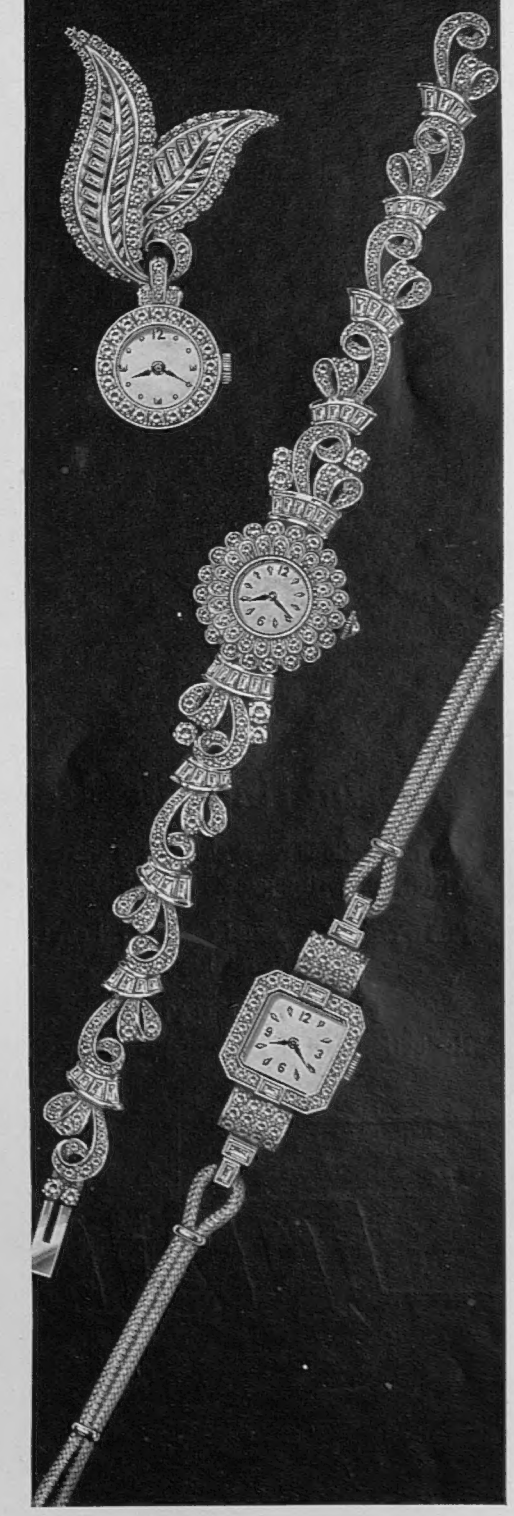

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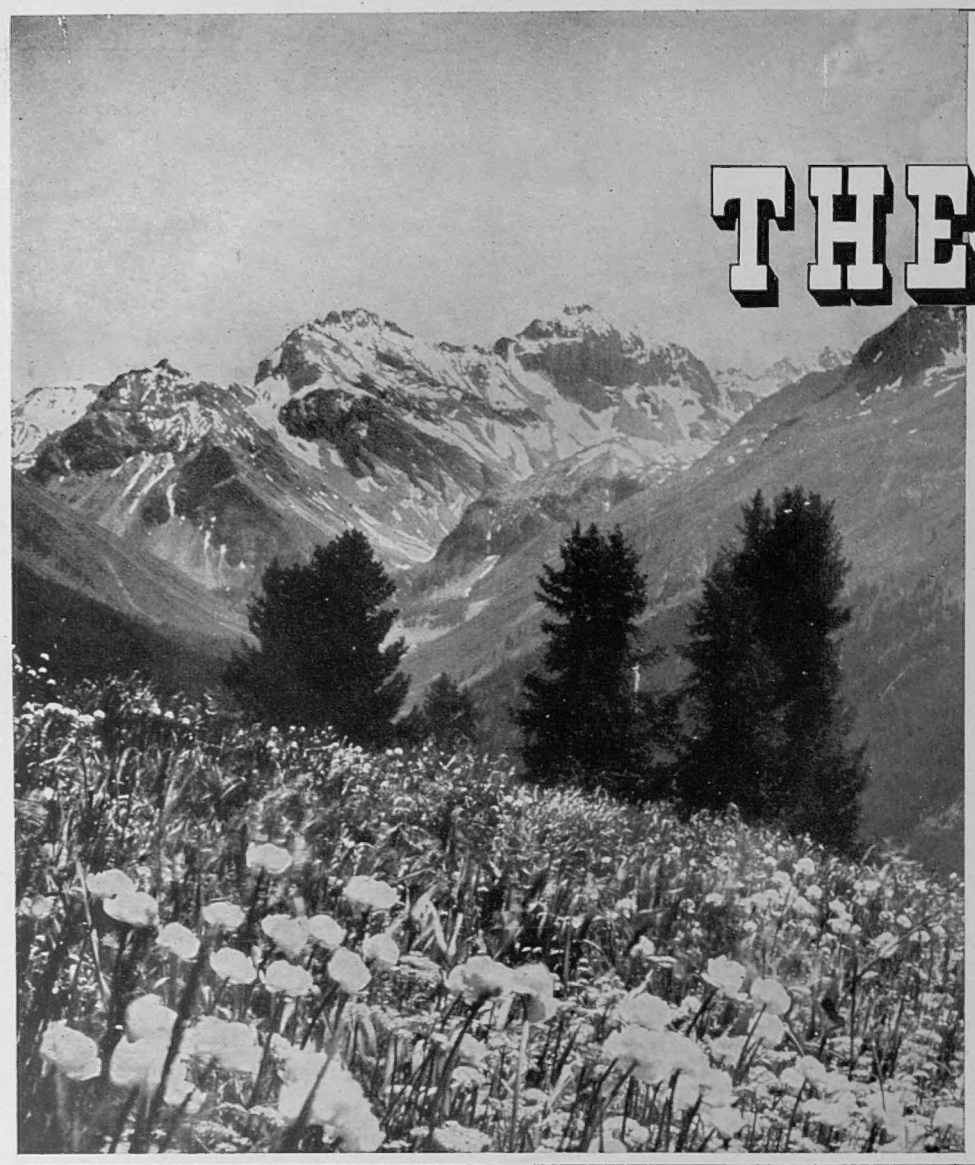

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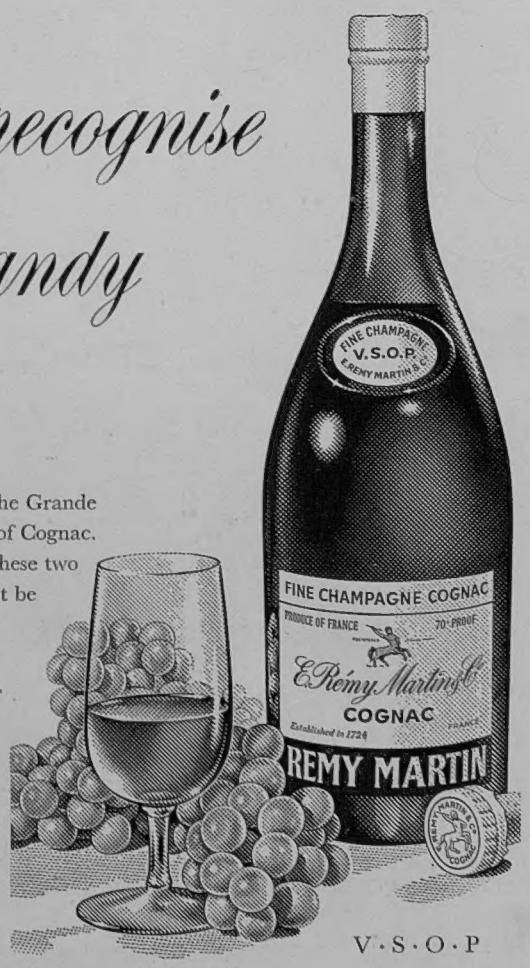

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